Index to Volume 101

July–December, 2004

Author Index

ABBOTT NJ. *See* Yarnitsky D, 303

ABDULRAUF SI. Impact of temporal lobe surgery. Editorial, 738

———, SINCOFF EH. Anterior cerebral artery. Letters, 717

———. *See* Sincoff EH, 739

ABE M, TABUCHI K, TANAKA S, HODOZUKA A, KUNISHIO K, KUBO N, NISHIMURA Y. Capillary hemangioma of the central nervous system, 73

ABRAHAMS JM. *See* Stiefel MF, 594

ADAMO MA. *See* Deshaies EM, 858

ADCOCK JE. *See* Byrne JV, 717

AFOKE A. *See* Smit X, 648

AGRAWAL D. *See* Kurve A, 567

AGRAWAL DK. *See* Nathoo N, 233

ÅGREN-Wilsson A. *See* Lenfeldt N, 944

AKDEMIR I. *See* Topsakal C, 295

AKPOLAT N. *See* Topsakal C, 295

AL-MEFTY O, KADRI PAS, PRAVDENKOVA S, SAWYER JR, STANGEBY C, HUSAIN M. Malignant progression in meningioma: documentation of a series and analysis of cytogenetic findings, 210

ALBANESE A. *See* Pentimalli L, 1018

ALBUQUERQUE FC. *See* Klopfenstein JD, 889

ALLARD M. *See* Aouizerate B, 682

ALTIBRANDI MG. *See* Peppe A, 195

ÁLVAREZ F. *See* Isla A, 545

ALVAREZ-CARILLES J. *See* Cohen-Gadol AA, 926

AMIDEI C. *See* Reilly C, 255

AMIEVA H. *See* Aouizerate B, 682

AMIN-HANJANI S. *See* Charbel FT, 977

ANDERSSON N. *See* Lenfeldt N, 944

AOUIZERATE B, CUNY E, GUEHL D, BURBAUD P. Deep brain stimulation and psychosurgery. Editorial, 575

———, ———, MARTIN-GUEHL C, GUEHL D, AMIEVA H, BENAZZOUZ A, FABRIGOULE C, ALLARD M, ROUGIER A, BIOULAC B, TIGNOL J, BURBAUD P. Deep brain stimulation of the ventral caudate nucleus in the treatment of obsessive-compulsive disorder and major depression. Case report, 682

ARIMA T. *See* Fujita M, 1012

ARRIADA N, SOTELO J. Continuous-flow shunt for treatment of hydrocephalus due to lesions of the posterior fossa, 762

ATAN MS, MOOCHHALA SM, NG KC, LOW K, TEO AL, LU J. Effects of aminoguanidine and L-arginine methyl ester resuscitation following induction of fluid-percussion injury and severe controlled hemorrhagic shock in the rat brain, 138

ATKINSON JLD. *See* Toussaint LG III, 921

AUER RN. *See* Zhu CZ, 664

AYDIN S. *See* Kaynar MY, 1030

AYUDHYA NSN. *See* Saesue P, 1061

AZEVEDO HC. *See* Batista LL, 717

BABA T. *See* Kato A, 779

BANKIEWICZ KS. *See* Saito R, 826

BARKHOUDARIAN G. *See* Cowan JA Jr, 694

BARNETT GH. *See* Nathoo N, 233

BASSI A. *See* Peppe A, 195

BATISTA LL, AZEVEDO HC. Anterior cerebral artery. Letters, 717

BATJER HH. *See* Zoumalan RA, 854

BAUMANN TK. *See* Burchiel KJ, 872

BECK H. *See* Moriyama E, 421

BEDERSON JB. *See* Sehba FA, 633

BELZBERG AJ, DORSI MJ, STORM PB, MORIARITY JL. Surgical repair of brachial plexus injury: a multinational survey of experienced peripheral nerve surgeons, 365

———. Surgical repair of brachial plexus injury. Editorial, 363

BENAZZOUZ A. *See* Aouizerate B, 682

BENDOK BR. *See* Hoi Y, 676

———. *See* Zoumalan RA, 854

BENSON D. *See* Shahlaie K, 890

BENVENISTE RJ, KING WA, WALSH J, LEE JS, NAIDICH TP, POST KD. Surgery for Rathke cleft cysts: technical considerations and outcomes, 577

BERENSTEIN A. *See* Brisman JL, 154

———. *See* Yoshino Y, 996

BERGENHEIM AT. *See* Lenfeldt N, 944

BERGER MS. *See* Berman JI, 66

———. *See* Saito R, 826

BERMAN JI, BERGER MS, MUKHERJEE P, HENRY RG. Diffusion-tensor imaging–guided tracking of fibers of the pyramidal tract combined with intraoperative cortical stimulation mapping in patients with gliomas, 66

BERTELLI JA, GHIZONI MF. Contralateral motor rootlets and ipsilateral nerve transfers in brachial plexus reconstruction, 770

BIOULAC B. *See* Aouizerate B, 682

BLOOM S. *See* Stiefel MF, 241, 594

BOJANOWSKI MW. *See* McLaughlin N, 600

BOLING WW, OLIVIER A. Localization of hand sensory function to the pli de passage moyen of Broca, 278

BOND R. *See* Cunningham EJ, 445

BOOKHEIMER SY. *See* Pouratian N, 458

BORGES LRR. *See* Maia ACM Jr, 970

BORNSTEIN R. *See* Yarnitsky D, 303

BORTOLOTTI C. *See* Kraus RR, 352

BOULOS AS, DESHAIES EM, QIAN J, POPP AJ. Preoperative

stent placement for intradural vertebral artery stenosis from a rare xanthogranuloma. Case report, 864
Bova FJ. *See* Zipfel GJ, 393
Bowen KK. *See* Türeyen K, 799
Bradshaw P. *See* Zipfel GJ, 393
Brandis A. *See* Roser F, 528
Bringas J. *See* Saito R, 826
Brisman JL, Roonprapunt C, Song JK, Niimi Y, Setton A, Berenstein A, Flamm ES. Intentional partial coil occlusion followed by delayed clip application of wide-necked middle cerebral artery aneurysms in patients presenting with severe vasospasm. Report of two cases, 154
Britton JW. *See* Maramattom BV, 546
Broaddus WC. *See* Chen Z, 314
———. *See* Tashjian V, 521
Brodkey JA, Tasker RR, Hamani C, Mcandrews MP, Dostrovsky JO, Lozano AM. Tremor cells in the human thalamus: differences among neurological disorders, 43
Bronen RA. *See* Cohen-Gadol AA, 55
Brotchi J. *See* Pirotte B, 476
Brown PD. *See* Piedra MP, 1053
Brown RD. *See* Ecker RD, 904
Brown RD Jr. *See* Flemming KD, 82
Brusa L. *See* Peppe A, 195
Bullock MR. *See* Daugherty WP, 499
———. *See* Tolias CM, 435
Bullock R. *See* Reinert M, 323
Bundgaard H. *See* Rasmussen M, 621
Burbaud P. *See* Aouizerate B, 575, 682
Burchiel KJ, Baumann TK. Pathophysiology of trigeminal neuralgia: new evidence from a trigeminal ganglion intraoperative microneurographic recording. Case report, 872
———. Dystonia and deep brain stimulation. Editorial, 179
Burke AM. *See* Zoumalan RA, 854
Burry MV. *See* Eskioglu E, 767
Bydon A. *See* Seyfried D, 104
Bynevelt M. *See* Kern M, 1065
Byrne JV, Adcock JE. Seizures and subarachnoid hemorrhage. Letters, 717

Callender DL. *See* Hentschel SJ, 935
Cannestra AF. *See* Pouratian N, 458
Cantando J. *See* Siddiqi J, 354
Carpenter PC. *See* Piedra MP, 1053
Chahlavi A, Steinmetz MP, Masaryk TJ, Rasmussen PA. A transcranial approach for direct mechanical thrombectomy of dural sinus thrombosis. Report of two cases, 347
Chan AA, Lau A, Pirzkall A, Chang SM, Verhey LJ, Larson D, McDermott MW, Dillon WP, Nelson SJ. Proton magnetic resonance spectroscopy imaging in the evaluation of patients undergoing gamma knife surgery for Grade IV glioma, 467
Chang SM. *See* Chan AA, 467
Chang SY. *See* Lee KH, 511
Chankaew E. *See* Saesue P, 1061
Charbel FT, Zhao M, Amin-Hanjani S, Hoffman W, Du X, Clark ME. A patient-specific computer model to predict outcomes of the balloon occlusion test, 977
Chawalparit O. *See* Saesue P, 1061
Chen J. *See* Seyfried D, 104
Chen ZJ, Gillies GT, Broaddus WC, Prabhu SS, Fillmore H, Mitchell RM, Corwin FD, Fatouros PP. A realistic brain tissue phantom for intraparenchymal infusion studies, 314
Chetty R. *See* Nathoo N, 233
Cho BK. *See* Park KH, 505
Chopp M. *See* Lu D, 813, 822
———. *See* Seyfried D, 104
Christianson TJH. *See* Flemming KD, 82
Cif L. *See* Coubes P, 189
———. *See* Vayssiere N, 181
Ciszek B. *See* Sharifi M, 832
Clark JF. *See* Morgan CJ, 1026
Clark ME. *See* Charbel FT, 977
Claustres M. *See* Coubes P, 189
Cloft HJ. *See* Ecker RD, 904
Cohen-Gadol AA, Özduman K, Bronen RA, Kim JH, Spencer DD. Long-term outcome after epilepsy surgery for focal cortical dysplasia, 55
———, Pan JW, Kim JH, Spencer DD, Hetherington HH. Mesial temporal lobe epilepsy: a proton magnetic resonance spectroscopy study and a histopathological analysis, 613
———, Spencer DD. Harvey W. Cushing and cerebrovascular surgery: Part I, aneurysms. Historical vignette, 547
———, ———. Harvey W. Cushing and cerebrovascular surgery: Part II, vascular malformations. Historical vignette, 553
———, Westerveld M, Alvarez-Carilles J, Spencer DD. Intracarotid Amytal memory test and hippocampal magnetic resonance imaging volumetry: validity of the Wada test as an indicator of hippocampal integrity among candidates for epilepsy surgery, 926
Cold GE. *See* Rasmussen M, 621
Coletti A. *See* Pentimalli L, 1018
Colosimo C. *See* Puca A, 1057
Connolly CA. *See* Nathoo N, 233
Corwin FD. *See* Chen Z, 314
Cosgrove GR. Deep brain stimulation and psychosurgery. Editorial, 574
Coubes P, Cif L, Fertit HE, Hemm S, Vayssiere N, Serrat S, Picot MC, Tuffery S, Claustres M, Echenne B, Frerebeau P. Electrical stimulation of the globus pallidus internus in patients with primary generalized dystonia: long-term results, 189
———. *See* Vayssiere N, 181
Couldwell WT, Feindel W, Rovit RL. William Osler at McGill University: the Baby Professor and his early contributions to neurosurgery. Historical vignette, 705
———. *See* Fassett DR, 869
Cowan JA Jr, Barkhoudarian G, Yang LJS, Thompson BG. Progression of a posterior communicating artery infundibulum into an aneurysm in a patient with Alagille syndrome. Case report, 694
Cruz J. High-dose mannitol. Letters, 568
Csiszar K. *See* Karlsson J, 128
Cunningham EJ, Bond R, Mayberg MR, Warlow CP, Rothwell PM. Risk of persistent cranial nerve injury after carotid endarterectomy, 445
Cuny E. *See* Aouizerate B, 575, 682
Czosnyka M, Richards HK, Czosnyka Z, Pickard JD. Normal-pressure hydrocephalus, 1083
Czosnyka Z. *See* Czosnyka M, 1083

DA ROCHA AJ. *See* Maia ACM Jr, 970
DA SILVA CJ. *See* Maia ACM Jr, 970
DAGHER JH. *See* Harissi-Dagher M, 843
DANIEL RT, LEE GYF, REILLY PL. Suprapineal recess: an alternate site for third ventriculostomy? Case report, 518
DASTGIR A. *See* Hentschel SJ, 935
DATE I. *See* Tokunaga K, 697
DAUGHERTY WP, LEVASSEUR JE, SUN D, ROCKSWOLD GL, BULLOCK MR. Effects of hyperbaric oxygen therapy on cerebral oxygenation and mitochondrial function following moderate lateral fluid-percussion injury in rats, 499
DAVID P. *See* Pirotte B, 476
DE AUGUSTÍN D. *See* Isla A, 545
DE BOER KS. *See* Malessy MJA, 377
DE MELO JGSP. *See* Maia ACM Jr, 970
DEMONTE F. *See* Hentschel SJ, 935
DE MULDER G. *See* De Ridder D, 172
DE RIDDER D, DE MULDER G, WALSH V, MUGGLETON N, SUNAERT S, MØLLER A. Tinnitis and auditory cortex. Letters, 172
DE RUITER GCW. *See* Malessy MJA, 377
DE TRIBOLET N. *See* Dehdashti AR, 402
DECKERT M. *See* Löhr M, 336
DEHDASHTI AR, RILLIET B, RUFENACHT DA, DE TRIBOLET N. Shunt-dependent hydrocephalus after rupture of intracranial aneurysms: a prospective study of the influence of treatment modality, 402
DELETIS V. *See* SZELÉNYI A, 563
DÉMONET JF. *See* Lubrano V, 787
DEMONTE F. *See* Hentschel SJ, 935
DEMPSEY RJ. *See* Türeyen K, 799
DERAMOND H. *See* Peltier J, 690
DESENCLOS C. *See* Peltier J, 690
DESHAIES EM, ADAMO MA, QIAN J, DIRISIO DA. A carcinoid tumor mimicking an isolated intracranial meningioma. Case report, 858
———. *See* Boulos AS, 864
DEZAWA M. *See* Mimura T, 806
DIETSCH GN. *See* Pradilla G, 88
DILLON WP. *See* Chan AA, 467
DILLS CV. *See* Leiphart JW, 641
DIRICAN A. *See* Kaynar MY, 1030
DIRISIO DA. *See* Deshaies EM, 858
DOPPENBERG EMR. *See* Tashjian V, 521
DORSI MJ. *See* Belzberg AJ, 365
DOSTROVSKY JO. *See* Brodkey JA, 43
DOTT U. *See* Schick U, 951
DOUYON P. *See* Murali R, 163
DU X. *See* Charbel FT, 977
DUFOUR H. *See* Fuentes S, 704
DUMONT A. Book review, 1078
DUMONT AS. Seizures and subarachnoid hemorrhage. Letters, 718

ECHENNE B. *See* Coubes P, 189
ECKER RD, BROWN RD, NICHOLS DA, MCCLELLAND RL, REINALDA MS, PIEPGRAS DG, CLOFT HJ, KALLMES DF. Cost of treating high-risk symptomatic carotid artery stenosis: stent insertion and angioplasty compared with endarterectomy, 904
EFTEKHAR B, GHODSI M, NEJAT F, KETABCHI E, ESMAEELI B. Prophylactic administration of ceftriaxone for the prevention of meningitis after traumatic pneumocephalus: results of a clinical trial, 757
EKLUND A. *See* Lenfeldt N, 944
ELLIOTT JP. *See* Heuer GC, 408
———. *See* Smith MJ, 1
ELMÉR E. *See* Karlsson J, 128
ENATSU R. *See* Mikuni N, 536
EROL FS. *See* Topsakal C, 295
ESKIOGLU E, BURRY MV, MERICLE RA. Transradial approach for neuroendovascular surgery of intracranial vascular lesions, 767
ESMAEELI B. *See* Eftekhar B, 757
ESPEY MG. *See* Jung CS, 836

FABRIGOULE C. *See* Aouizerate B, 682
FAHLBUSCH R. *See* Ganslandt O, 284
———. *See* Stadlbauer A, 287
FAHY BG. *See* Rie MA, 564
FANTINI C. *See* Pentimalli L, 1018
FASSETT DR, SCHLOESSER PE, COULDWELL WT. Hemorrhage from moyamoya-like vessels associated with a cerebral arteriovenous malformation. Case report, 869
FATOUROS PP. *See* Chen Z, 314
FAULDER K. *See* Ingebrigtsen T, 108
FEINDEL W. *See* Couldwell WT, 705
FEIZ-ERFAN I. *See* Klopfenstein JD, 889
FERGUSON RL, JOBE K. A quiet hand for microneurosurgery: twiddle your thumb. Technical note, 541
FERRAZ FAP. *See* Maia ACM Jr, 970
FERRIS AD. *See* Senatus PB, 1073
FERTIT HE. *See* Coubes P, 189
FILLMORE H. *See* Chen Z, 314
FIORELLA DJ. *See* Klopfenstein JD, 889
FLAMM ES. *See* Brisman JL, 154
FLEMMING KD, WIEBERS DO, BROWN RD JR, LINK MJ, NAKATOMI H, HUSTON J III, MCCLELLAND R, CHRISTIANSON TJH. Prospective risk of hemorrhage in patients with vertebrobasilar nonsaccular intracranial aneurysm, 82
FOERCH C, LANG JM, KRAUSE J, RAABE A, SITZER M, SEIFERT V, STEINMETZ H, KESSLER KR. Functional impairment, disability, and quality of life outcome after decompressive hemicraniectomy in malignant middle cerebral artery infarction, 248
FONG KSK. *See* Karlsson J, 128
FOOTE RL, POLLOCK BE, LINK MJ, GARCES YI, KLINE RW. Leksell Gamma Knife coordinate setting slippage: how often, how much? 590
FORAGE J. Book review, 167
FORD B. *See* Senatus PB, 1073
FRAZIER JL, PRADILLA G, WANG PP, TAMARGO RJ. Inhibition of cerebral vasospasm by intracranial delivery of ibuprofen from a controlled-release polymer in a rabbit model of subarachnoid hemorrhage, 93
———. *See* Pradilla G, 99
FREIMAN TM, SURGES R, VOUGIOUKAS VI, HUBBE U, TALAZKO J, ZENTNER J, HONEGGER J, SCHULZE-BONHAGE A. Complex visual hallucinations (Charles Bonnet syndrome) in visual field defects following cerebral surgery. Report of four cases, 846
FREREBEAU P. *See* Coubes P, 189
———. *See* Vayssiere N, 181
FRIEDMAN JA. *See* Toussaint LG III, 921
FRIEDMAN WA. *See* Kondziolka D, 585

———. *See* William A, 392
———. *See* Zipfel GJ, 393
Friedrich V Jr. *See* Sehba FA, 633
Fuentes JM. *See* Fuentes S, 704
Fuentes S, Levrier O, Metellus P, Dufour H, Fuentes JM, Grisoli F. Giant fusiform intracranial A_2 aneurysm: endovascular and surgical treatment. Case illustration, 704
Fujii K. *See* Yamada M, 25
Fujii Y. *See* Nakada T, 310
———. *See* Sorimachi T, 343
Fujimoto Y. *See* Kato A, 779
Fujisawa H. *See* Miyashita K, 1045
Fujita M, Mizuno M, Nagasaka T, Wakabayashi T, Maeda K, Ishii D, Arima T, Kawajiri A, Inagaki M, Yoshida J. Aurora-B dysfunction of multinucleated giant cells in glioma detected by site-specific phosphorylated antibodies, 1012
Fukaya C. *See* Yamamoto T, 201
Fukuda M. *See* Murakami H, 861
Fukushima N. *See* Oikawa S, 1037

Gaab MR. *See* Schroeder HWS, 227
Gabbai AA. *See* Maia ACM Jr, 970
Ganslandt O, Fahlbusch R, Nimsky C, Stadlbauer A, Moser E. Technology in the resection of gliomas and the definition of madness. Editorial, 284
———. *See* Stadlbauer A, 287
Garces YI. *See* Foote RL, 590
Gatherer A. *See* Hattori N, 417
Germano IM, Gracies JM, Weisz DJ, Tse W, Koller WC, Olanow CW. Unilateral stimulation of the subthalamic nucleus in Parkinson disease: a double-blind 12-month evaluation study, 36
Ghatak N. *See* Tashjian V, 521
Ghearing GR. *See* Maramattom BV, 546
Ghizoni MF. *See* Bertelli JA, 770
Ghodsi M. *See* Eftekhar B, 757
Gill SS. *See* Plaha P, 48
Gillies GT. *See* Chen Z, 314
Gilman C. *See* Tolias CM, 435
Goldman S. *See* Pirotte B, 476
Goodman RR. *See* Senatus PB, 1073
Gorbach AM, Heiss JD, Kopylev L, Oldfield EH. Intraoperative infrared imaging of brain tumors, 960
Goto T. *See* Saesue P, 330
Goussev A. *See* Lu D, 813, 822
Govender ST. *See* Nathoo N, 720
Gracias VH. *See* Stiefel MF, 241
Gracies JM. *See* Germano IM, 36
Grady MS. *See* Stiefel MF, 241, 594
Grisoli F. *See* Fuentes S, 704
Gross WP. *See* Löhr M, 336
Gross Y. *See* Yarnitsky D, 303
Gruber S. *See* Stadlbauer A, 287
Guehl D. *See* Aouizerate B, 575, 682
Guimarães IF. *See* Maia ACM Jr, 970
Gumustas K. *See* Kaynar MY, 1030
Guterman LR. *See* Hoi Y, 676

Hadeishi H. *See* Matsubara S, 908
Hamada J. Ruptured vertebral artery dissection. Letters, 170
———. *See* Shinojima N, 219
Hamani C. *See* Brodkey JA, 43
Hamazaki F. *See* Kanematsu M, 532
Han PP. *See* Klopfenstein JD, 889
Han SK. *See* Park KH, 505
Han Y. *See* Seyfried D, 104
Hanel RA. *See* Hoi Y, 676
———. *See* Kim SH, 151
Hans V. *See* Roser F, 528
Hansson MJ. *See* Karlsson J, 128
Harissi-Dagher M, Sebag M, Dagher JH, Moumdjian R. Chorioretinal atrophy in a patient with moyamoya disease. Case report, 843
Harrer JU, Möller-Hartmann W, Oertel MF, Klötzsch C. Perfusion imaging of high-grade gliomas: a comparison between contrast harmonic and magnetic resonance imaging. Technical note, 700
Harvey-White J. *See* Jung CS, 836
Hasegawa H. *See* Murakami H, 861
Hasegawa M. *See* Miyashita K, 1045
Hashi K. *See* Mikami T, 1082
Hashimoto N. *See* Kato A, 779
———. *See* Kikuta K, 607
———. *See* Mikuni N, 536
Hashimoto T. *See* Nakagawa A, 145
Hashimoto Y. *See* Imaizumi T, 915
Hassler W. *See* Schick U, 951
Hatano M, Mizuno M, Yoshida J. Enhancement of C2-ceramide antitumor activity by small interfering RNA on X chromosome–linked inhibitor of apoptosis protein in resistant human glioma cells, 119
Hattori N, Katayama Y, Maya Y, Gatherer A. Impact of stereotactic hematoma evacuation on activities of daily living during the chronic period following spontaneous putaminal hemorrhage: a randomized study, 417
Hayashi Y. *See* Miyashita K, 1045
Heiss JD. *See* Gorbach AM, 960
Hemm S. *See* Coubes P, 189
———. *See* Vayssiere N, 181
Henry RG. *See* Berman JI, 66
Hentschel SJ, Nader R, Suki D, Dastgir A, Callender DL, DeMonte F. Craniofacial resections in the elderly: an outcome study, 935
Heros RC. Human serum albumin. Letters, 566
Hetherington HH. *See* Cohen-Gadol AA, 613
Heuer GC, Smith MJ, Elliott JP, Winn HR, Leroux PD. Relationship between intracranial pressure and other clinical variables in patients with aneurysmal subarachnoid hemorrhage, 408
Heuer GG. *See* Stiefel MF, 241, 594
Higashi T. *See* Tokunaga K, 697
Hirano T. *See* Nakagawa A, 145
Hirano Y. *See* Kinouchi H, 989
Hirata M. *See* Tani N, 687
Hirato M. *See* Watanabe K, 564
Hirayama A. *See* Kato A, 779
Hodozuka A. *See* Abe M, 73
Hoffman W. *See* Charbel FT, 977
Hoi Y, Meng H, Woodward SH, Bendok BR, Hanel RA, Guterman LR, Hopkins LN. Effects of arterial geometry on aneurysm growth: three-dimensional computational fluid dynamics study, 676
Holtmannspoetter M. *See* Yousry I, 427
Honegger J. *See* Freiman TM, 846

HONGO K. *See* Saesue P, 330
HOPKINS LN. *See* Hoi Y, 676
———. *See* Kim SH, 151
HORITA Y. *See* Imaizumi T, 915
HORIUCHI T. *See* Saesue P, 330
HOSHIDA T. *See* Kaido T, 114
HOUKIN K. *See* Mikami T, 1082
HOVIUS SER. *See* Smit X, 648
HOWARD MA III. Tinnitis and auditory cortex. Letters, 171
HOYA K. *See* Yoshimoto Y, 169
HSU F. *See* Kim JY, 354
HSU FPK. Book review, 715
HUBBE U. *See* Freiman TM, 846
HUSAIN M. *See* Al-Mefty O, 210
HUSAIN SR. *See* Kawakami K, 1004
HUSTON J III. *See* Flemming KD, 82

ICHI S. *See* Ueta T, 1070
IGBASEIMOKUMO U. Quantification of in vivo Photofrin uptake by human pituitary adenoma tissue, 272
IMAIZUMI T, HORITA Y, HASHIMOTO Y, NIWA J. Dotlike hemosiderin spots on T2*-weighted magnetic resonance imaging as a predictor of stroke recurrence: a prospective study, 915
INAGAKI M. *See* Fujita M, 1012
INGEBRIGTSEN L. *See* Ingebrigtsen T, 108
INGEBRIGTSEN T, MORGAN MK, FAULDER K, INGEBRIGTSEN L, SPARR T, SCHIRMER H. Bifurcation geometry and the presence of cerebral artery aneurysms, 108
ISHII D. *See* Fujita M, 1012
ISHIKAWA S. *See* Moriyama E, 421
ISHIMARU Y. *See* Shinojima N, 219
ISLA A, PÉREZ-LÓPEZ C, DE AUGUSTÍN D, ÁLVAREZ F, MARTÍNEZ JR. Neuritis ossificans of the sciatic nerve. Case illustration, 545
ITO Y. *See* Murakami H, 861
IULIANO BA. *See* Jung CS, 836

JAHROMI BS. *See* Reilly C, 255
JAUCH EC. *See* Morgan CJ, 1026
JOBE K. *See* Ferguson RL, 541
JOKURA H. *See* Nakagawa A, 145
JUNG CS, IULIANO BA, HARVEY-WHITE J, ESPEY MG, OLDFIELD EH, PLUTA RM. Association between cerebrospinal fluid levels of asymmetric dimethyl-L-arginine, an endogenous inhibitor of endothelial nitric oxide synthase, and cerebral vasospasm in a primate model of subarachnoid hemorrhage, 836

KACIRA T. *See* Kaynar MY, 1030
KADRI PAS. *See* Al-Mefty O, 210
KAFADAR AM. *See* Kaynar MY, 1030
KAIDO T, HOSHIDA T, TAOKA T, SAKAKI T. Retinotopy with coordinates of lateral occipital cortex in humans, 114
KALLMES DF. *See* Ecker RD, 904
KAMEDA M. *See* Tokunaga K, 697
KANEMATSU M, SATOH K, NAKAJIMA N, HAMAZAKI F, NAGAHIRO S. Ruptured aneurysm arising from a basilar artery fenestration and associated with a persistent primitive hypoglossal artery. Case report and review of the literature, 532
KANNO H. *See* Mimura T, 806
KANO T. *See* Yamamoto T, 201
KANTER AS. *See* Laws ER, 571
KAPLAN M. *See* Topsakal C, 295
KARLSSON J, FONG KSK, HANSSON MJ, ELMÉR E, CSISZAR K, KEEP MF. Life span extension and reduced neuronal death after weekly intraventricular cyclosporin injections in the G93A transgenic mouse model of amytrophic lateral sclerosis, 128
KASUYA H. Fisher's classification. Letters, 356
KATAYAMA Y. *See* Hattori N, 417
———. *See* Yamamoto T, 201
KATO A, FUJIMOTO Y, TANIGUCHI M, HASHIMOTO N, HIRAYAMA A, KINOSHITA M, BABA T, MARUNO M, YOSHIMINE T. Volumetric thermal devascularization of large meningiomas, 779
———. *See* Tani N, 687
KATTAH J. *See* Kraus RR, 352
KAUL CL. *See* Sharma SS, 669
KAWAGISHI K. *See* Oikawa S, 1037
KAWAGUCHI T. *See* Murakami H, 861
KAWAJIRI A. *See* Fujita M, 1012
KAWAKAMI K, KAWAKAMI M, KIOI M, HUSAIN SR, PURI RK. Distribution kinetics of targeted cytotoxin in glioma by bolus or convection-enhanced delivery in a murine model, 1004
KAWAKAMI M. *See* Kawakami K, 1004
KAWAMOTO S. *See* Shin M, 18
KAYNAR MY, TANRIVERDI T, KAFADAR AM, KACIRA T, UZUN H, AYDIN S, GUMUSTAS K, DIRICAN A, KUDAY C. Detection of soluble intercellular adhesion molecule–1 and vascular cell adhesion molecule–1 in both cerebrospinal fluid and serum of patients after aneurysmal subarachnoid hemorrhage, 1030
KEEP MF. *See* Karlsson J, 128
KELLY PJ. Technology in the resection of gliomas and the definition of madness. Editorial, 284
KERN M, LEE G, ROBBINS P, BYNEVELT M, WATSON P. Intracranial metastatic parathyroid carcinoma. Case report and review of the literature, 1065
KESSLER KR. *See* Foerch C, 248
KETABCHI E. *See* Eftekhar B, 757
KHOO L. *See* Onibokun A, 715
KIKUCHI H. *See* Kikuta K, 607
KIKUTA K, NOZAKI K, TAKAHASHI JA, MIYAMOTO S, KIKUCHI H, HASHIMOTO N. Postoperative evaluation of microsurgical resection for cavernous malformations of the brainstem, 607
KILIC N. *See* Topsakal C, 295
KIM D. *See* Spivak C, 1079
KIM DH, MUROVIC JA, TIEL R, KLINE DG. Management and outcomes in 353 surgically treated sciatic nerve lesions, 8
KIM JH. *See* Cohen-Gadol AA, 55, 613
KIM JY, HSU F. Book review, 354
KIM LJ. *See* Klopfenstein JD, 889
KIM SH, QURESHI AI, LEVY EI, HANEL RA, SIDDIQUI AM, HOPKINS LN. Emergency stent placement for symptomatic acute carotid artery occlusion after endarterectomy. Case report, 151
KIM SK. *See* Park KH, 505
KIM U. *See* Lee KH, 511
KIM YW. *See* Park KH, 505
KING WA. *See* Benveniste RJ, 577
KINOSHITA M. *See* Kato A, 779
KINOUCHI H, YANAGISAWA T, SUZUKI A, OHTA T, HIRANO

Y, Sugawara T, Sasajima T, Mizoi K. Simultaneous microscopic and endoscopic monitoring during surgery for internal carotid artery aneurysms, 989
Kioi M. *See* Kawakami K, 1004
Kirino T. *See* Shin M, 18
Kitahara T. *See* Yamada M, 25
Kiyosue H. *See* Tanoue S, 159
Klimo P Jr. *See* Schmidt RH, 357
Kline DG. Surgical repair of brachial plexus injury. Editorial, 361
———. *See* Kim DH, 8
Kline RW. *See* Foote RL, 590
Klopfenstein JD, Spetzler RF, Kim LJ, Feiz-Erfan I, Han PP, Zabramski JM, Porter RW, Albuquerque FC, Mcdougall CG, Fiorella DJ. Intraoperative angiography. Letters, 889
Klötzsch C. *See* Harrer JU, 700
Klug N. *See* Löhr M, 336
Knopman J. *See* Sehba FA, 633
Kobayashi K. *See* Yamamoto T, 201
Kochi M. *See* Shinojima N, 219
Kofke WA. *See* Rie MA, 564
Koller WC. *See* Germano IM, 36
Kondziolka D, Lunsford LD, Loeffler JS, Friedman WA. Radiosurgery and radiotherapy: observations and clarifications, 585
———. Radiosurgery and radiotherapy. Editorial, 573
Kopylev L. *See* Gorbach AM, 960
Koskinen LD. *See* Lenfeldt N, 944
Krajewski P. *See* Sharifi M, 832
Kraus RR, Kattah J, Bortolotti C, Lanzino G. Oculomotor palsy from an unruptured posterior communicating artery aneurysm presenting with cerebrospinal fluid pleocytosis and enhancement of the third cranial nerve. Case report, 352
Krause J. *See* Foerch C, 248
Krishnan KG. Pavlov and Cushing. Letters, 889
Kubo N. *See* Abe M, 73
Kuchelmeister K. *See* Rellecke P, 653
Kuday C. *See* Kaynar MY, 1030
Kunicki J. *See* Sharifi M, 832
Kunishio K. *See* Abe M, 73
Kurata A. *See* Yamada M, 25
Kuratsu J. *See* Shinojima N, 219
Kurita H. *See* Shin M, 18
Kurve A, Agrawal D. High-dose mannitol. Letters, 567
Kusaka Y. *See* Nakagawa A, 145
Kwee IL. *See* Nakada T, 310

Lamensdorf I. *See* Yarnitsky D, 303
Lang JM. *See* Foerch C, 248
Lanzino G. *See* Kraus RR, 352
Lanzoni OP. *See* Maia ACM Jr, 970
Larson D. *See* Chan AA, 467
Lau A. *See* Chan AA, 467
Lauriola L. *See* Puca A, 1057
Laws ER, Kanter AS. Rathke cleft cysts. Editorial, 571
———. Book review, 888
Laws ER Jr. *See* Leung GKK, 262
Le Gars D. *See* Peltier J, 690
Le Roux PD. *See* Smith MJ, 1
Lee CT. *See* Park KH, 505
Lee G. *See* Kern M, 1065
Lee GYF. *See* Daniel RT, 518
Lee J. *See* Park KH, 505
Lee JS. *See* Benveniste RJ, 577
Lee KH, Chang SY, Roberts DW, Kim U. Neurotransmitter release from high-frequency stimulation of the subthalamic nucleus, 511
Legnani FG. *See* Pradilla G, 88, 99
Lehman RM. Dystonia. Letters, 719
Leiphart JW, Dills CV, Levy RM. Alpha$_2$-adrenergic receptor subtype specificity of intrathecally administered tizanidine used for analgesia for neuropathic pain, 641
Lenfeldt N, Andersson N, Ågren-Wilsson A, Bergenheim AT, Koskinen LOD, Eklund A, Malm J. Cerebrospinal fluid pulse pressure method: a possible substitute for the examination of B-waves, 944
LeRoux PD. *See* Heuer GC, 408
———. *See* Stiefel MF, 241, 594
Leung GKK, Lopes MBS, Thorner MO, Vance ML, Laws ER Jr. Primary hypophysitis: a single-center experience in 16 cases, 262
Levasseur JE. *See* Daugherty WP, 499
Levivier M. *See* Pirotte B, 476
Levrier O. *See* Fuentes S, 704
Levy EI. *See* Kim SH, 151
Levy RM. *See* Leiphart JW, 641
Li Y. *See* Lu D, 813
Link MJ. *See* Flemming KD, 82
———. *See* Foote RL, 590
———. *See* Piedra MP, 1053
Lipszyc M. *See* Pirotte B, 476
Liu AY. *See* Tashjian V, 521
Loeffler JS. *See* Kondziolka D, 585
Löhr M, Stenzel W, Plum G, Gross WP, Deckert M, Klug N. Whipple disease confined to the central nervous system presenting as a solitary frontal tumor. Case report, 336
Lopes MBS. *See* Leung GKK, 262
Lorian A. *See* Yarnitsky D, 303
Low K. *See* Atan MS, 138
Lozano AM. *See* Brodkey JA, 43
Lu D, Mahmood A, Goussev A, Schallert T, Qu C, Zhang ZG, Li Y, Lu M, Chopp M. Atorvastatin reduction of intravascular thrombosis, increase in cerebral microvascular patency and integrity, and enhancement of spatial learning in rats subjected to traumatic brain injury, 813
———, ———, Qu C, Goussev A, Lu M, Chopp M. Atorvastatin reduction of intracranial hematoma volume in rats subjected to controlled cortical impact, 822
———. *See* Seyfried D, 104
Lu J. *See* Atan MS, 138
Lu M. *See* Lu D, 813, 822
Lubrano V, Roux FE, Démonet JF. Writing-specific sites in frontal areas: a cortical stimulation study, 787
Lucas TH II, Mckhann GM II, Ojemann GA. Functional separation of languages in the bilingual brain: a comparison of electrical stimulation language mapping in 25 bilingual patients and 117 monolingual control patients, 449
Lunsford LD. *See* Kondziolka D, 585
Lyders E. *See* Tashjian V, 521

MacDonald JD. *See* Schmidt RH J, 357
MacDonald RL. *See* Reilly C, 255

MAHABIR RC, SZYMCZAK A, SUTHERLAND GR. Intracerebral pneumatocele presenting after air travel, 340
MAHMOOD A. *See* Lu D, 813, 822
MAIA ACM JR, MALHEIROS SMF, DA ROCHA AJ, STÁVALE JN, GUIMARÃES IF, BORGES LRR, SANTOS AJ, DA SILVA CJ, DE MELO JGSP, LANZONI OP, GABBAI AA, FERRAZ FAP. Stereotactic biopsy guidance in adults with supratentorial nonenhancing gliomas: role of perfusion-weighted magnetic resonance imaging, 970
MAIRA G. *See* Pentimalli L, 1018
MAKINO K. *See* Shinojima N, 219
MALESSY MJA, DE RUITER GCW, DE BOER KS, THOMEER RTWM. Evaluation of suprascapular nerve neurotization after nerve graft or transfer in the treatment of brachial plexus traction lesions, 377
MALHEIROS SMF. *See* Maia ACM Jr, 970
MALM J. *See* Lenfeldt N, 944
MALONEY-WILENSKY E. *See* Stiefel MF, 241, 594
MARAMATTOM BV, BRITTON JW, GHEARING GR, WIJDICKS EFM. Ictal bradycardia after endovascular treatment of an aneurysm. Case illustration, 546
MARCHESE E. *See* Pentimalli L, 1018
MARIANI L, SCHALLER B, WEIS J, OZDOBA C, SEILER RW. Esthesioneuroblastoma of the pituitary gland: a clinicopathological entity? Case report and review of the literature, 1049
MARINO R JR. *See* Wen HT, 747
MARTIN NA. *See* Pouratian N, 458
MARTÍNEZ JR. *See* Isla A, 545
MARTIN-GUEHL C. *See* Aouizerate B, 682
MARUNO M. *See* Kato A, 779
MARUYAMA K. *See* Shin M, 18
MASARYK TJ. *See* Chahlavi A, 347
MASSAGER N. *See* Pirotte B, 476
MATSUBARA S, HADEISHI H, SUZUKI A, YASUI N, NISHIMURA H. Incidence and risk factors for growth of unruptured cerebral aneurysms: observation using serial computerized tomography angiography, 908
MATSUMOTO S. *See* Tanoue S, 159
MATSUNO A, OKAZAKI R, OKI Y, NAGASHIMA T. Secretion of high-molecular-weight adrenocorticotropic hormone from a pituitary adenoma in a patient without Cushing stigmata. Case report, 874
MAYA Y. *See* Hattori N, 417
MAYBERG MR. *See* Cunningham EJ, 445
MAYEVSKY A. *See* Yarnitsky D, 303
MAYHAN WG. *See* Yarnitsky D, 303
MAZZONE P. *See* Peppe A, 195
MCANDREWS MP. *See* Brodkey JA, 43
MCCLELLAND R. *See* Flemming KD, 82
MCCLELLAND RL. *See* Ecker RD, 904
———. *See* Toussaint LG III, 921
MCCLELLAND S III. *See* Senatus PB, 1073
MCDERMOTT MW. *See* Chan AA, 467
MCDOUGALL CG. *See* Klopfenstein JD, 889
MCGIRT MJ, WOODWORTH G, THOMAS G, MILLER N, WILLIAMS M, RIGAMONTI D. Cerebrospinal fluid shunt placement for pseudotumor cerebri–associated intractable headache: predictors of treatment response and an analysis of long-term outcomes, 627
MCIVER JI. *See* Toussaint LG III, 921
MCKHANN GM II. *See* Lucas TH II, 449
———. *See* Senatus PB, 1073
MCLAUGHLIN N, BOJANOWSKI MW. Early surgery-related complications after aneurysm clip placement: an analysis of causes and patient outcomes, 600
MEADA K. *See* Fujita M, 1012
MENEZES V. *See* Nakagawa A, 145
MENG H. *See* Hoi Y, 676
MENOVSKY T. Bipolar forceps, 1082
MERICLE RA. *See* Eskioglu E, 767
METELLUS P. *See* Fuentes S, 704
MEYER FB. *See* Pollock BE, 390
———. *See* Toussaint LG III, 921
MIKAMI T, HOUKIN K, HASHI K. Bipolar forceps, 1082
MIKUNI N, SATOW T, TAKI J, NISHIDA N, ENATSU R, HASHIMOTO N. Endotracheal tube electrodes to map and monitor activities of the vagus nerve intraoperatively. Technical note, 536
MILLER N. *See* McGirt MJ, 627
MIMURA T, DEZAWA M, KANNO H, SAWADA H, YAMAMOTO I. Peripheral nerve regeneration by transplantation of bone marrow stromal cell–derived Schwann cells in adult rats, 806
MINETA T. *See* Ueda S, 659
MIREK H. *See* Saito R, 826
MITCHELL RM. *See* Chen Z, 314
MIYAMOTO S. *See* Kikuta K, 607
MIYASAKA Y. *See* Yamada M, 25
MIYASHITA K, HAYASHI Y, FUJISAWA H, HASEGAWA M, YAMASHITA J. Recurrent intracranial solitary fibrous tumor with cerebrospinal fluid dissemination. Case report, 1045
MIZOI K. *See* Kinouchi H, 989
MIZUNO M. *See* Fujita M, 1012
———. *See* Hatano M, 119
MODESTI A. *See* Pentimalli L, 1018
MØLLER A. *See* De Ridder D, 172
MÖLLER-HARTMANN W. *See* Harrer JU, 700
MOOCHHALA SM. *See* Atan MS, 138
MORGAN CJ, PYNE-GEITHMAN GJ, JAUCH EC, SHUKLA R, WAGNER KR, CLARK JF, ZUCCARELLO M. Bilirubin as a cerebrospinal fluid marker of sentinel subarachnoid hemorrhage: a preliminary report, 1026
MORGAN MK. *See* Ingebrigtsen T, 108
MORI H. *See* Tanoue S, 159
MORIARITY JL. *See* Belzberg AJ, 365
MORIGGL B. *See* Yousry I, 427
MORIIZUMI T. *See* Oikawa S, 1037
MORITA A. *See* Shin M, 18
MORIYAMA E, OGAWA T, NISHIDA A, ISHIKAWA S, BECK H. Quantitative analysis of radioisotope cisternography in the diagnosis of intracranial hypotension, 421
MOSER E. *See* Ganslandt O, 284
———. *See* Stadlbauer A, 287
MOSTAFA G. *See* Sehba FA, 633
MOUMDJIAN R. *See* Harissi-Dagher M, 843
MUANGSOMBOON S. *See* Saesue P, 1061
MUGGLETON N. *See* De Ridder D, 172
MUKHERJEE P. *See* Berman JI, 66
MUNUSAMY S. *See* Sharma SS, 669
MURAKAMI H, KAWAGUCHI T, FUKUDA M, ITO Y, HASEGAWA H, TANAKA R. Monitoring of the lateral spread response in the endovascular treatment of a hemifacial spasm caused by an unruptured vertebral artery aneurysm. Case report, 861
MURALI R, DOUYON P, OMEIS I. Large anterior skull base lesions in patients presenting with obstructive sleep apnea. Report of two cases and review of the literature, 163

MUROVIC JA. *See* Kim DH, 8
MUTZE S. Normal-pressure hydrocephalus, 1084

NADER R. *See* Hentschel SJ, 935
NADKARNI T, REKATE HL, WALLACE D. Resolution of pseudotumor cerebri after bariatric surgery for related obesity. Case report, 878
NAGAHIRO S. *See* Kanematsu M, 532
NAGASAKA T. *See* Fujita M, 1012
NAGASHIMA T. *See* Matsuno A, 874
NAGATOMI H. *See* Tanoue S, 159
NAIDICH TP. *See* Benveniste RJ, 577
———. *See* Yousry I, 427
NAKADA T, FUJII Y, KWEE IL. Coerced training of the nondominant hand resulting in cortical reorganization: a high-field functional magnetic resonance imaging study, 310
NAKAGAWA A, HIRANO T, JOKURA H, UENOHARA H, OHKI T, HASHIMOTO T, MENEZES V, SATO Y, KUSAKA Y, OHYAMA H, SAITO T, TAKAYAMA K, SHIRANE R, TOMINAGA T. Pulsed holmium:yltrium-aluminum-garnet laser–induced liquid jet as a novel dissection device in neuroendoscopic surgery, 145
NAKAHARA Y. *See* Ueda S, 659
NAKAJIMA N. *See* Kanematsu M, 532
NAKAMURA H. *See* Shinojima N, 219
NAKAMURA M. *See* Roser F, 528
NAKATOMI H. *See* Flemming KD, 82
NARDO PD. *See* Pentimalli L, 1018
NAROTAM PK. *See* Nathoo N, 233
NATHOO N, GOVENDER ST, VAN DELLEN JR. Treatment of hydrocephalus. Letters, 720
———, NAROTAM PK, AGRAWAL DK, CONNOLLY CA, VAN DELLEN JR, BARNETT GH, CHETTY R. Influence of apoptosis on neurological outcome following traumatic cerebral contusion, 233
NEJAT F. *See* Eftekhar B, 757
NELSON SJ. *See* Chan AA, 467
NG KC. *See* Atan MS, 138
NICHOLS DA. *See* Ecker RD, 904
———. *See* Toussaint LG III, 921
NIIMI Y. *See* Brisman JL, 154
———. *See* Yoshino Y, 996
NIMSKY C. *See* Ganslandt O, 284
———. *See* Stadlbauer A, 287
NISHIDA A. *See* Moriyama E, 421
NISHIDA N. *See* Mikuni N, 536
NISHIMURA H. *See* Matsubara S, 908
NISHIMURA Y. *See* Abe M, 73
NIWA J. *See* Imaizumi T, 915
NOZAKI K. *See* Kikuta K, 607

OCHI T. *See* Ueta T, 1070
OERTEL J. *See* Schroeder HWS, 227
OERTEL MF. *See* Harrer JU, 700
OGATA L. *See* Pradilla G, 88
OGAWA T. *See* Moriyama E, 421
OHKI T. *See* Nakagawa A, 145
OHTA T. *See* Kinouchi H, 989
OHYAMA H. *See* Nakagawa A, 145
OIKAWA S, KAWAGISHI K, YOKOUCHI K, FUKUSHIMA N, MORIIZUMI T. Immunohistochemical determination of the sympathetic pathway in the orbit via the cranial nerves in humans, 1037
OJEMANN GA. *See* Lucas TH II, 449
OKAMOTO H. *See* Ueda S, 659
OKAZAKI R. *See* Matsuno A, 874
OKI Y. *See* Matsuno A, 874
OLANOW CW. *See* Germano IM, 36
OLDFIELD EH. *See* Gorbach AM, 960
———. *See* Jung CS, 836
OLIVIER A. *See* Boling WW, 278
OMEIS I. *See* Murali R, 163
ONIBOKUN A, KHOO L. Book review, 715
OSHIMA H. *See* Yamamoto T, 201
OYESIKU NM. Book review, 167
OZDOBA C. *See* Mariani L, 1049
ÖZDUMAN K. *See* Cohen-Gadol AA, 55
OZVEREN MF. *See* Topsakal C, 295

PAN JW. *See* Cohen-Gadol AA, 613
PARK KH, LEE J, YOO CG, KIM YW, HAN SK, SHIM YS, KIM SK, WANG KC, CHO BK, LEE CT. Application of *p27* gene therapy for human malignant glioma potentiated by using mutant *p27*, 505
PARKINSON D. Intraoperative angiography. Letters, 889
PARKINSON RJ. *See* Zoumalan RA, 854
PATEL KP. *See* Yarnitsky D, 303
PATEL NK. *See* Plaha P, 48
PAVOT P. *See* Tashjian V, 521
PELTIER J, TOUSSAINT P, DESENCLOS C, LE GARS D, DERAMOND H. Cerebral venous angioma of the pons complicated by nonhemorrhagic infarction. Case report, 690
PENTIMALLI L, MODESTI A, VIGNATI A, MARCHESE E, ALBANESE A, ROCCO FD, COLETTI A, NARDO PD, FANTINI C, TIRPAKOVA B, MAIRA G. Role of apoptosis in intracranial aneurysm rupture, 1018
PEPPE A, PIERANTOZZI M, BASSI A, ALTIBRANDI MG, BRUSA L, STEFANI A, STANZIONE P, MAZZONE P. Stimulation of the subthalamic nucleus compared with the globus pallidus internus in patients with Parkinson disease, 195
PEREZ J. *See* Tashjian V, 521
PÉREZ-LÓPEZ C. *See* Isla A, 545
PICHELMANN MA. *See* Toussaint LG III, 921
PICKARD JD. *See* Czosnyka M, 1083
PICOT MC. *See* Coubes P, 189
PIEDRA MP, BROWN PD, CARPENTER PC, LINK MJ. Resolution of diabetes insipidus following gamma knife surgery for a solitary metastasis to the pituitary stalk. Case report, 1053
PIEPGRAS DG. *See* Ecker RD, 904
———. *See* Toussaint LG III, 921
PIERANTOZZI M. *See* Peppe A, 195
PIROTTE B, GOLDMAN S, MASSAGER N, DAVID P, WIKLER D, LIPSZYC M, SALMON I, BROTCHI J, LEVIVIER M. Combined use of ^{18}F-fluorodeoxyglucose and ^{11}C-methionine in 45 positron emission tomography–guided stereotactic brain biopsies, 476
PIRZKALL A. *See* Chan AA, 467
PLAHA P, PATEL NK, GILL SS. Stimulation of the subthalamic region for essential tremor, 48
PLUM G. *See* Löhr M, 336
PLUTA RM. *See* Jung CS, 836
POLLOCK BE, MEYER FB. Radiosurgery for arteriovenous malformations. Editorial, 390
———. *See* Foote RL, 590

Popp AJ. Music, musicians, and the brain: an exploration of musical genius. The 2004 Presidential address, 895
———. *See* Boulos AS, 864
Porter RW. *See* Klopfenstein JD, 889
Post KD. Rathke cleft cysts. Editorial, 572
———. *See* Benveniste RJ, 577
Pouratian N, Cannestra AF, Bookheimer SY, Martin NA, Toga AW. Variability of intraoperative electrocortical stimulation mapping parameters across and within individuals, 458
Prabhu SS. *See* Chen Z, 314
Pradilla G, Wang PP, Legnani FG, Frazier JL, Tamargo RJ. Pharmacokinetics of controlled-release polymers in the subarachnoid space after subarachnoid hemorrhage in rabbits, 99
———, ———, ———, Ogata L, Dietsch GN, Tamargo RJ. Prevention of vasospasm by anti-CD11/CD18 monoclonal antibody therapy following subarachnoid hemorrhage in rabbits, 88
———. *See* Frazier JL, 93
Pravdenkova S. *See* Al-Mefty O, 210
Puca A, Colosimo C, Tirpakova B, Lauriola L, Rocco FD. Cavernous hemangioma extending to the extracranial, intracranial, and orbital regions. Case report, 1057
Pullman SL. *See* Senatus PB, 1073
Puri RK. *See* Kawakami K, 1004
Pyne-Geithman GJ. *See* Morgan CJ, 1026

Qian J. *See* Boulos AS, 864
———. *See* Deshaies EM, 858
Qu C. *See* Lu D, 813, 822
Qureshi AI. *See* Kim SH, 151

Raabe A. *See* Foerch C, 248
Raghavan R. Book review, 562
Rasmussen M, Bundgaard H, Cold GE. Craniotomy for supratentorial brain tumors: risk factors for brain swelling after opening the dura mater, 621
Rasmussen PA. *See* Chahlavi A, 347
Reilly C, Amidei C, Tolentino J, Jahromi BS, Macdonald RL. Clot volume and clearance rate as independent predictors of vasospasm after aneurysmal subarachnoid hemorrhage, 255
Reilly PL. *See* Daniel RT, 518
Reinalda MS. *See* Ecker RD, 904
Reinert M, Schaller B, Widmer HR, Seiler R, Bullock R. Influence of oxygen therapy on glucose-lactate metabolism after diffuse brain injury, 323
———. *See* Tolias CM, 435
Rekate HL. *See* Nadkarni T, 878
Rellecke P, Kuchelmeister K, Schachenmayr W, Schlegel J. Mismatch repair protein hMSH2 in primary drug resistance in in vitro human malignant gliomas, 653
Rhoton AL Jr. *See* Tanriover N, 484
———. *See* Wen HT, 747
Richards HK. *See* Czosnyka M, 1083
Rie MA, Fahy BG, Kofke WA. Human serum albumin. Letters, 564
Rigamonti D. *See* McGirt MJ, 627
Rilliet B. *See* Dehdashti AR, 402
Robbins P. *See* Kern M, 1065
Roberts DW. Radiosurgery and radiotherapy. Editorial, 573
———. *See* Lee KH, 511
Rocco FD. *See* Pentimalli L, 1018
———. *See* Puca A, 1057
Rockswold GL. *See* Daugherty WP, 499
Roonprapunt C. *See* Brisman JL, 154
Rosenfeld JV. Brain abscess. Letters, 169
Roser F, Nakamura M, Brandis A, Hans V, Vorkapic P, Samii M. Transition from meningeal melanocytoma to primary cerebral melanoma. Case report, 528
Rothwell PM. *See* Cunningham EJ, 445
Rougier A. *See* Aouizerate B, 682
Roux FE. *See* Lubrano V, 787
Rovit RL. *See* Couldwell WT, 705
Rufenacht DA. *See* Dehdashti AR, 402

Saesue P, Chankaew E, Chawalparit O, Ayudhya NSN, Muangsomboon S, Sangruchi T. Primary extraskeletal osteosarcoma in the pineal region. Case report, 1061
———, Horiuchi T, Goto T, Tanaka Y, Hongo K. Functional role of the Na^+/H^+ exchanger in the regulation of cerebral arteriolar tone in rats, 330
Sailor KA. *See* Türeyen K, 799
Saito M. *See* Sorimachi T, 343
Saito N. *See* Watanabe K, 564
Saito R, Bringas J, Mirek H, Berger MS, Bankiewicz KS. Invasive phenotype observed in 1,3-bis(2-chloroethyl)-1-nitrosourea–resistant sublines of 9L rat glioma cells: a tumor model mimicking recurrent malignant glioma, 826
Saito T. *See* Nakagawa A, 145
Saitoh Y. *See* Tani N, 687
Sakai K. *See* Tokunaga K, 697
Sakaki T. *See* Kaido T, 114
Salmon I. *See* Pirotte B, 476
Samii M. *See* Roser F, 528
Sangruchi T. *See* Saesue P, 1061
Santos AJ. *See* Maia ACM Jr, 970
Sasajima T. *See* Kinouchi H, 989
Sasaki T. *See* Watanabe K, 564
Sato Y. *See* Nakagawa A, 145
Satoh K. *See* Kanematsu M, 532
Satow T. *See* Mikuni N, 536
Sawada H. *See* Mimura T, 806
Sawyer JR. *See* Al-Mefty O, 210
Schachenmayr W. *See* Rellecke P, 653
Schaller B. *See* Mariani L, 1049
———. *See* Reinert M, 323
Schallert T. *See* Lu D, 813
Scharf A. *See* Tolias CM, 435
Schick U, Dott U, Hassler W. Surgical management of meningiomas involving the optic nerve sheath, 951
Schiff D. Gliomas following organ transplantation: analysis of the contents of a tumor registry, 932
Schirmer H. *See* Ingebrigtsen T, 108
Schlegel J. *See* Rellecke P, 653
Schloesser PE. *See* Fassett DR, 869
Schmid UD. *See* Yousry I, 427
Schmidt RH, Klimo P Jr, MacDonald JD. Fisher's classification. Letters, 357
Schneller SJ. *See* Senatus PB, 1073
Schroeder HWS, Oertel J, Gaab MR. Endoscope-assisted microsurgical resection of epidermoid tumors of the cerebellopontine angle, 227
Schulze-Bonhage A. *See* Freiman TM, 846

SEBAG M. *See* Harissi-Dagher M, 843
SEHBA FA, MOSTAFA G, KNOPMAN J, FRIEDRICH V JR, BEDERSON JB. Acute alterations in microvascular basal lamina after subarachnoid hemorrhage, 633
SEIFERT V. *See* Foerch C, 248
SEILER R. *See* Reinert M, 323
———. *See* Tolias CM, 435
SEILER RW. *See* Mariani L, 1049
SENATUS PB, MCCLELLAND S III, FERRIS AD, FORD B, WINFIELD LM, PULLMAN SL, YU Q, MCKHANN GM II, SCHNELLER SJ, GOODMAN RR. Implantation of bilateral deep brain stimulator in two patients with Parkinson disease and preexisting cardiac pacemakers. Report of two cases, 1073
SERRAT S. *See* Coubes P, 189
SETTON A. *See* Brisman JL, 154
SEYFRIED D, HAN Y, LU D, CHEN J, BYDON A, CHOPP M. Improvement in neurological outcome after administration of atorvastatin following experimental intracerebral hemorrhage in rats, 104
SHAHLAIE K, BENSON D, WATSON J. Pavlov and Cushing. Letters, 890
SHALEV A. *See* Yarnitsky D, 303
SHARIFI M, KUNICKI J, KRAJEWSKI P, CISZEK B. Endoscopic anatomy of the chordae willisii in the superior sagittal sinus, 832
SHARMA SS, MUNUSAMY S, THIYAGARAJAN M, KAUL CL. Neuroprotective effect of peroxynitrite decomposition catalyst and poly(adenosine diphosphate–ribose) polymerase inhibitor alone and in combination in rats with focal cerebral ischemia, 669
SHIM YS. *See* Park KH, 505
SHIN M, MARUYAMA K, KURITA H, KAWAMOTO S, TAGO M, TERAHARA A, MORITA A, UEKI K, TAKAKURA K, KIRINO T. Analysis of nidus obliteration rates after gamma knife surgery for arteriovenous malformations based on long-term follow-up data: the University of Tokyo experience, 18
SHINOJIMA N, KOCHI M, HAMADA J, NAKAMURA H, YANO S, MAKINO K, TSUIKI H, TADA K, KURATSU J, ISHIMARU Y, USHIO Y. The influence of sex and the presence of giant cells on postoperative long-term survival in adult patients with supratentorial glioblastoma multiforme, 219
SHIRAISHI T. *See* Ueda S, 659
SHIRANE R. *See* Nakagawa A, 145
SHORER S. *See* Yarnitsky D, 303
SHUKLA R. *See* Morgan CJ, 1026
SIDDIQI J, CANTANDO J. Book review, 354
SIDDIQUI AM. *See* Kim SH, 151
SILANE M. *See* Yoshino Y, 996
SINCOFF EH, TAN Y, ABDULRAUF SI. White matter fiber dissection of the optic radiations of the temporal lobe and implications for surgical approaches to the temporal horn, 739
———. *See* Abdulrauf SI, 717
SITZER M. *See* Foerch C, 248
SMIT X, VAN NECK JW, AFOKE A, HOVIUS SER. Reduction of neural adhesions by biodegradable autocrosslinked hyaluronic acid gel after injury of peripheral nerves: an experimental study, 648
SMITH MJ, LE ROUX PD, ELLIOTT JP, WINN HR. Blood transfusion and increased risk for vasospasm and poor outcome after subarachnoid hemorrhage, 1
———. *See* Heuer GC, 408
———. *See* Stiefel MF, 241, 594
SMITH RW. Book review, 888
SONG JK. *See* Brisman JL, 154
———. *See* Yoshino Y, 996
SORIMACHI T, FUJII Y, TSUCHIYA N, SAITO M. Striatal hyperintensity on T_1-weighted magnetic resonance images and high-density signal on CT scans obtained in patients with hyperglycemia and no involuntary movement. Report of two cases, 343
SORIN J. *See* Zoumalan RA, 854
SOTELO J. *See* Arriada N, 762
SPARR T. *See* Ingebrigtsen T, 108
SPENCER DD. *See* Cohen-Gadol AA, 55, 547, 553, 613, 926
SPETZLER RF. *See* Klopfenstein JD, 889
SPIEGEL J. Dystonia. Letters, 719
SPIVAK C, KIM D. Book review, 1079
STADLBAUER A, MOSER E, GRUBER S, NIMSKY C, FAHLBUSCH R, GANSLANDT O. Integration of biochemical images of a tumor into frameless stereotaxy achieved using a magnetic resonance imaging/magnetic resonance spectroscopy hybrid data set, 287
———. *See* Ganslandt O, 284
STANGEBY C. *See* Al-Mefty O, 210
STANZIONE P. *See* Peppe A, 195
STÁVALE JN. *See* Maia ACM Jr, 970
STEFANI A. *See* Peppe A, 195
STEINMETZ H. *See* Foerch C, 248
STEINMETZ MP. *See* Chahlavi A, 347
STENZEL W. *See* Löhr M, 336
STIEFEL MF, HEUER GG, ABRAHAMS JM, BLOOM S, SMITH MJ, MALONEY-WILENSKY E, GRADY MS, LEROUX PD. The effect of nimodipine on cerebral oxygenation in patients with poor-grade subarachnoid hemorrhage, 594
———, ———, SMITH MJ, BLOOM S, MALONEY-WILENSKY E, GRACIAS VH, GRADY MS, LEROUX PD. Cerebral oxygenation following decompressive hemicraniectomy for the treatment of refractory intracranial hypertension, 241
STORM PB. *See* Belzberg AJ, 365
SUAREZ JI. Human serum albumin. Letters, 566
SUGAWARA T. *See* Kinouchi H, 989
SUGIU K. *See* Tokunaga K, 697
SUKI D. *See* Hentschel SJ, 935
SUN D. *See* Daugherty WP, 499
SUNAERT S. *See* De Ridder D, 172
SURGES R. *See* Freiman TM, 846
SUTHERLAND GR. *See* Mahabir RC, 340
SUZUKI A. *See* Kinouchi H, 989
———. *See* Matsubara S, 908
SUZUKI I. *See* Ueta T, 1070
SZELÉNYI A, DELETIS V. Motor evoked potentials. Letters, 563
SZYMCZAK A. *See* Mahabir RC, 340

TABUCHI K. *See* Abe M, 73
———. *See* Ueda S, 659
TADA K. *See* Shinojima N, 219
TAGO M. *See* Shin M, 18
TAKAHASHI A. *See* Watanabe K, 564
TAKAHASHI JA. *See* Kikuta K, 607
TAKAKURA K. *See* Shin M, 18
TAKAYAMA K. *See* Nakagawa A, 145
TAKI J. *See* Mikuni N, 536

TALAZKO J. *See* Freiman TM, 846
TAMARGO RJ. *See* Frazier JL, 93
———. *See* Pradilla G, 88, 99
TAN Y. *See* Sincoff EH, 739
TANAKA R. *See* Murakami H, 861
TANAKA S. *See* Abe M, 73
TANAKA Y. *See* Saesue P, 330
TANI N, SAITOH Y, HIRATA M, KATO A, YOSHIMINE T. Bilateral cortical stimulation for deafferentation pain after spinal cord injury. Case report, 687
TANIGUCHI M. *See* Kato A, 779
TANOUE S, KIYOSUE H, MATSUMOTO S, YAMASHITA M, NAGATOMI H, MORI H. Ruptured "blisterlike" aneurysm with a pseudoaneurysm formation requiring delayed intervention with endovascular coil embolization. Case report, 159
TANRIOVER N, ULM AJ, RHOTON AL JR, YASUDA A. Comparison of the transvermian and telovelar approaches to the fourth ventricle, 484
TANRIVERDI T. *See* Kaynar MY, 1030
TAOKA T. *See* Kaido T, 114
TASHJIAN V, DOPPENBERG EMR, LYDERS E, BROADDUS WC, PAVOT P, TYE G, LIU AY, PEREZ J, GHATAK N. Diagnosis of Erdheim–Chester disease by using computerized tomography–guided stereotactic biopsy of a caudate lesion. Case report, 521
TASKER RR. *See* Brodkey JA, 43
TEO AL. *See* Atan MS, 138
TERAHARA A. *See* Shin M, 18
TERASAKA K. *See* Tokunaga K, 697
TERBRUGGE KG. *See* van Dijk JMC, 31
THIYAGARAJAN M. *See* Sharma SS, 669
THOMAS G. *See* McGirt MJ, 627
THOMEER RTWM. *See* Malessy MJA, 377
THOMPSON BG. *See* Cowan JA Jr, 694
THORNER MO. *See* Leung GKK, 262
TIEL R. *See* Kim DH, 8
TIFTIKCI M. *See* Topsakal C, 295
TIGNOL J. *See* Aouizerate B, 682
TIRPAKOVA B. *See* Pentimalli L, 1018
———. *See* Puca A, 1057
TOGA AW. *See* Pouratian N, 458
TOKUNAGA K, SUGIU K, KAMEDA M, SAKAI K, TERASAKA K, HIGASHI T, DATE I. Persistent primitive trigeminal artery–cavernous sinus fistula with intracerebral hemorrhage: endovascular treatment using detachable coils in a transarterial double-catheter technique. Case report and review of the literature, 697
TOLENTINO J. *See* Reilly C, 255
TOLIAS CM, REINERT M, SEILER R, GILMAN C, SCHARF A, BULLOCK MR. Normobaric hyperoxia–induced improvement in cerebral metabolism and reduction in intracranial pressure in patients with severe head injury: a prospective historical cohort–matched study, 435
TOMINAGA T. *See* Nakagawa A, 145
TOPSAKAL C, AKPOLAT N, EROL FS, OZVEREN MF, AKDEMIR I, KAPLAN M, TIFTIKCI M, KILIC N. Sepraflm superior to Gore-Tex in the prevention of peridural fibrosis, 295
TOUSSAINT LG III, FRIEDMAN JA, WIJDICKS EFM, PIEPGRAS DG, PICHELMANN MA, MCIVER JI, MCCLELLAND RL, NICHOLS DA, MEYER FB, ATKINSON JLD. Influence of aspirin on outcome following aneurysmal subarachnoid hemorrhage, 921
TOUSSAINT P. *See* Peltier J, 690
TSE W. *See* Germano IM, 36
TSUCHIYA N. *See* Sorimachi T, 343
TSUIKI H. *See* Shinojima N, 219
TUFFERY S. *See* Coubes P, 189
TÜRE U. *See* YASARGIL MG, 725
TÜREYEN K, VEMUGANTI R, SAILOR KA, BOWEN KK, DEMPSEY RJ. Transient focal cerebral ischemia–induced neurogenesis in the dentate gyrus of the adult mouse, 799
TURNBULL I. Book review, 1080
TYE G. *See* Tashjian V, 521

UCHIDA T. *See* Yoshimoto Y, 169
UEDA S, MINETA T, NAKAHARA Y, OKAMOTO H, SHIRAISHI T, TABUCHI K. Induction of the DNA repair gene *O*^{6}-*methylguanine-DNA methyltransferase* by dexamethasone in glioblastomas, 659
UEKI K. *See* Shin M, 18
UENOHARA H. *See* Nakagawa A, 145
UETA T, ICHI S, OCHI T, SUZUKI I. Spontaneous regression of an aneurysm at a nonbranching site of the supraclinoid internal carotid artery. Case report, 1070
ULM AJ. *See* Tanriover N, 484
USHIO Y. *See* Shinojima N, 219
UZUN H. *See* Kaynar MY, 1030

VAN DELLEN JR. Book review, 714
———. *See* Nathoo N, 233, 720
VAN DER GAAG N. *See* Vayssiere N, 181
VAN DIJK JMC, TERBRUGGE KG, WILLINSKY RA, WALLACE MC. Selective disconnection of cortical venous reflux as treatment for cranial dural arteriovenous fistulas, 31
van NECK JW. *See* Smit X, 648
VANCE ML. *See* Leung GKK, 262
VAYSSIERE N, COUBES P. Dystonia and deep brain stimulation. Editorial, 179
———, VAN DER GAAG N, CIF L, HEMM S, VERDIER R, FREREBEAU P, COUBES P. Deep brain stimulation for dystonia confirming a somatotopic organization in the globus pallidus internus, 181
———. *See* Coubes P, 189
VEMUGANTI R. *See* Türeyen K, 799
VERDIER R. *See* Vayssiere N, 181
VERHEY LJ. *See* Chan AA, 467
VIGNATI A. *See* Pentimalli L, 1018
VORKAPIC P. *See* Roser F, 528
VOUGIOUKAS VI. *See* Freiman TM, 846

WAGNER FC JR. The Brain Research Laboratory at the Cleveland Metropolitan General Hospital and Case Western Reserve University. Historical vignette, 881
WAGNER KR. *See* Morgan CJ, 1026
WAKABAYASHI T. *See* Fujita M, 1012
WALLACE D. *See* Nadkarni T, 878
WALLACE MC. *See* van Dijk JMC, 31
WALSH J. *See* Benveniste RJ, 577
WALSH V. *See* De Ridder D, 172
WANG KC. *See* Park KH, 505
WANG PP. *See* Frazier JL, 93
———. *See* Pradilla G, 88, 99
WARLOW CP. *See* Cunningham EJ, 445
WATANABE K, WATANABE T, TAKAHASHI A, HIRATO M, SAITO N, SASAKI T. Motor evoked potentials. Letters, 564

WATANABE T. *See* Watanabe K, 564
WATSON J. *See* Shahlaie K, 890
WATSON P. *See* Kern M, 1065
WEEN JE. Book review, 355
WEIS J. *See* Mariani L, 1049
WEISZ DJ. *See* Germano IM, 36
WEN HT, RHOTON AL JR. MARINO R JR. Anatomical landmarks for hemispherotomy and their clinical application, 747
WESTERVELD M. *See* Cohen-Gadol AA, 926
WIDMER HR. *See* Reinert M, 323
WIEBERS DO. *See* Flemming KD, 82
WIJDICKS EFM. *See* Maramattom BV, 546
———. *See* Toussaint LG III, 921
WIKLER D. *See* Pirotte B, 476
WILKINSON HA. Brain abscess. Letters, 169
WILLIAM A, FRIEDMAN WA. Radiosurgery for arteriovenous malformations. Editorial, 392
WILLIAMS M. *See* McGirt MJ, 627
WILLINSKY RA. *See* van Dijk JMC, 31
WINFIELD LM. *See* Senatus PB, 1073
WINN HR. *See* Heuer GC, 408
———. *See* Smith MJ, 1
Wise BL. High-dose mannitol. Letters, 566
———. Treatment of hydrocephalus. Letters, 719
WOODWARD SH. *See* Hoi Y, 676
WOODWORTH G. *See* McGirt MJ, 627

YAMADA M, KITAHARA T, KURATA A, FUJII K, MIYASAKA Y. Intracranial vertebral artery dissection with subarachnoid hemorrhage: clinical characteristics and outcomes in conservatively treated patients, 25
YAMAMOTO I. *See* Mimura T, 806
YAMAMOTO T, KATAYAMA Y, KANO T, KOBAYASHI K, OSHIMA H, FUKAYA C. Deep brain stimulation for the treatment of parkinsonian, essential, and poststroke tremor: a suitable stimulation method and changes in effective stimulation intensity, 201
YAMASHITA J. *See* Miyashita K, 1045
YAMASHITA M. *See* Tanoue S, 159
YANAGISAWA T. *See* Kinouchi H, 989
YANG LJS. *See* Cowan JA Jr, 694
YANO S. *See* Shinojima N, 219
YARNITSKY D, GROSS Y, LORIAN A, SHALEV A, LAMENSDORF I, BORNSTEIN R, SHORER S, MAYEVSKY A, PATEL KP, ABBOTT NJ, MAYHAN WG. Blood–brain barrier opened by stimulation of the parasympathetic sphenopalatine ganglion: a new method for macromolecule delivery to the brain, 303
YASARGIL DCH. *See* YASARGIL MG, 725
YASARGIL MG, TÜRE U, YASARGIL DCH. Impact of temporal lobe surgery. Editorial, 725
YASUDA A. *See* Tanriover N, 484
YASUI N. *See* Matsubara S, 908
YOKOUCHI K. *See* Oikawa S, 1037
YOO CG. *See* Park KH, 505
YOSHIDA J. *See* Fujita M, 1012
———. *See* Hatano M, 119
YOSHIMINE T. *See* Kato A, 779
———. *See* Tani N, 687
YOSHIMOTO Y, HOYA K, UCHIDA T. Ruptured vertebral artery dissection. Letters, 169
YOSHINO Y, NIIMI Y, SONG JK, SILANE M, BERENSTEIN A. Endovascular treatment of intracranial aneurysms: comparative evaluation in a terminal bifurcation aneurysm model in dogs, 996
YOUSRY I, MORIGGL B, HOLTMANNSPOETTER M, SCHMID UD, NAIDICH TP, YOUSRY TA. Detailed anatomy of the motor and sensory roots of the trigeminal nerve and their neurovascular relationships: a magnetic resonance imaging study, 427
YOUSRY TA. *See* Yousry I, 427
YU Q. *See* Senatus PB, 1073

ZABRAMSKI JM. *See* Klopfenstein JD, 889
ZENTNER J. *See* Freiman TM, 846
ZHANG JH. Book review, 560
ZHANG ZG. *See* Lu D, 813
ZHAO M. *See* Charbel FT, 977
ZHU CZ, AUER RN. Optimal blood glucose levels while using insulin to minimize the size of infarction in focal cerebral ischemia, 664
ZIPFEL GJ, BRADSHAW P, BOVA FJ, FRIEDMAN WA. Do the morphological characteristics of arteriovenous malformations affect the results of radiosurgery? 393
ZOUMALAN RA, BENDOK BR, PARKINSON RJ, SORIN J, BURKE AM, BATJER HH. Association of an irregularly shaped anterior choroidal aneurysm with CREST syndrome. Case report, 854
ZUCCARELLO M. *See* Morgan CJ, 1026
ZYGUN D. High-dose mannitol. Letters, 567

Subject Index

A_1 segment
  Anterior cerebral artery. Letters, 717
Abnormal involuntary movement
  Stimulation of the subthalamic nucleus compared with the globus pallidus internus in patients with Parkinson disease, 195
Adenovirus
  Application of *p27* gene therapy for human malignant glioma potentiated by using mutant *p27*, 505
Adhesion
  Reduction of neural adhesions by biodegradable autocross-linked hyaluronic acid gel after injury of peripheral nerves: an experimental study, 648
  Seprafilm superior to Gore-Tex in the prevention of peridural fibrosis, 295
Adhesion molecule
  Detection of soluble intercellular adhesion molecule–1 and vascular cell adhesion molecule–1 in both cerebrospinal fluid and serum of patients after aneurysmal subarachnoid hemorrhage, 1030
Adrenocorticotropic hormone
  Secretion of high-molecular-weight adrenocorticotropic hormone from a pituitary adenoma in a patient without Cushing stigmata. Case report, 874
Agraphia
  Writing-specific sites in frontal areas: a cortical stimulation study, 787
Air travel
  Intracerebral pneumatocele presenting after air travel, 340
Alagille syndrome
  Progression of a posterior communicating artery infundibulum into an aneurysm in a patient with Alagille syndrome. Case report, 694
Albumin
  Human serum albumin. Letters, 564, 566
Alpha$_2$-adrenergic receptor
  Alpha$_2$-adrenergic receptor subtype specificity of intrathecally administered tizanidine used for analgesia for neuropathic pain, 641
Ambidexterity
  Coerced training of the nondominant hand resulting in cortical reorganization: a high-field functional magnetic resonance imaging study, 310
Amytrophic lateral sclerosis
  Life span extension and reduced neuronal death after weekly intraventricular cyclosporin injections in the G93A transgenic mouse model of amytrophic lateral sclerosis, 128
Analgesia
  Alpha$_2$-adrenergic receptor subtype specificity of intrathecally administered tizanidine used for analgesia for neuropathic pain, 641
Anatomical study
  Detailed anatomy of the motor and sensory roots of the trigeminal nerve and their neurovascular relationships: a magnetic resonance imaging study, 427
Aneurysm
  Association of an irregularly anterior choroidal aneurysm with CREST syndrome. Case report, 854
  Clot volume and clearance rate as independent predictors of vasospasm after aneurysmal subarachnoid hemorrhage, 255
  Detection of soluble intercellular adhesion molecule–1 and vascular cell adhesion molecule–1 in both cerebrospinal fluid and serum of patients after aneurysmal subarachnoid hemorrhage, 1030
  Effects of arterial geometry on aneurysm growth: three-dimensional computational fluid dynamics study, 676
  Harvey W. Cushing and cerebrovascular surgery: Part I, aneurysms. Historical vignette, 547
  Ictal bradycardia after endovascular treatment of an aneurysm. Case illustration, 546
  Intraoperative angiography. Letters, 889
  Prospective risk of hemorrhage in patients with vertebrobasilar nonsaccular intracranial aneurysm, 82
  Relationship between intracranial pressure and other clinical variables in patients with aneurysmal subarachnoid hemorrhage, 408
  Ruptured aneurysm arising from a basilar artery fenestration and associated with a persistent primitive hypoglossal artery. Case report and review of the literature, 532
  Shunt-dependent hydrocephalus after rupture of intracranial aneurysms: a prospective study of the influence of treatment modality, 402
Angiography
  A patient-specific computer model to predict outcomes of the balloon occlusion test, 977
  Intraoperative angiography. Letters, 889
Angioplasty
  Cost of treating high-risk symptomatic carotid artery stenosis: stent insertion and angioplasty compared with endarterectomy, 904
  Intentional partial coil occlusion followed by delayed clip application of wide-necked middle cerebral artery aneurysms in patients presenting with severe vasospasm. Report of two cases, 154
Animal model
  Endovascular treatment of intracranial aneurysms: comparative evaluation in a terminal bifurcation aneurysm model in dogs, 996
Anterior cerebral artery
  Anterior cerebral artery. Letters, 717
Anterior circulation
  Giant fusiform intracranial A_2 aneurysm: endovascular and surgical treatment. Case illustration, 704
Anterolateral skull base neoplasm
  Craniofacial resections in the elderly: an outcome study, 935
Anti-CD11/CD18 monoclonal antibody
  Prevention of vasospasm by anti-CD11/CD18 monoclonal antibody therapy following subarachnoid hemorrhage in rabbits, 88
Antibiotic prophylaxis
  Prophylactic administration of ceftriaxone for the prevention of meningitis after traumatic pneumocephalus: results of a clinical trial, 757
Antiepileptic drug
  Seizures and subarachnoid hemorrhage. Letters, 717, 718
Aortic coarctation
  Progression of a posterior communicating artery infundibulum into an aneurysm in a patient with Alagille syndrome. Case report, 694
Apoptosis
  Effects of aminoguanidine and L-arginine methyl ester resuscitation following induction of fluid-percussion injury and severe controlled hemorrhagic shock in the rat brain, 138
  Enhancement of C2-ceramide antitumor activity by small interfering RNA on X chromosome–linked inhibitor of apoptosis protein in resistant human glioma cells, 119
  Influence of apoptosis on neurological outcome following traumatic cerebral contusion, 233
  Role of apoptosis in intracranial aneurysm rupture, 1018

Aqueductal stenosis
Suprapineal recess: an alternate site for third ventriculostomy? Case report, 518
Arterial dissection
Intracranial vertebral artery dissection with subarachnoid hemorrhage: clinical characteristics and outcomes in conservatively treated patients, 25
Arterial remodeling
Effects of arterial geometry on aneurysm growth: three-dimensional computational fluid dynamics study, 676
Arteriovenous malformation
Analysis of nidus obliteration rates after gamma knife surgery for arteriovenous malformations based on long-term follow-up data: the University of Tokyo experience, 18
Do the morphological characteristics of arteriovenous malformations affect the results of radiosurgery? 393
Harvey W. Cushing and cerebrovascular surgery: Part II, vascular malformations. Historical vignette, 553
Hemorrhage from moyamoya-like vessels associated with a cerebral arteriovenous malformation. Case report, 869
Radiosurgery for arteriovenous malformations. Editorial, 390, 392
Transradial approach for neuroendovascular surgery of intracranial vascular lesions, 767
Aspirin
Influence of aspirin on outcome following aneurysmal subarachnoid hemorrhage, 921
Asymmetric dimethyl-L-arginine
Association between cerebrospinal fluid levels of asymmetric dimethyl-L-arginine, an endogenous inhibitor of endothelial nitric oxide synthase, and cerebral vasospasm in a primate model of subarachnoid hemorrhage, 836
Atorvastatin
Atorvastatin reduction of intracranial hematoma volume in rats subjected to controlled cortical impact, 822
Atorvastatin reduction of intravascular thrombosis, increase in cerebral microvascular patency and integrity, and enhancement of spatial learning in rats subjected to traumatic brain injury, 813
Auditory cortex
Tinnitis and auditory cortex. Letters, 171, 172
Aurora-B
Aurora-B dysfunction of multinucleated giant cells in glioma detected by site-specific phosphorylated antibodies, 1012
Avulsion injury
Contralateral motor rootlets and ipsilateral nerve transfers in brachial plexus reconstruction, 770

Ballistic movement
A quiet hand for microneurosurgery: twiddle your thumb. Technical note, 541
Balloon cell
Long-term outcome after epilepsy surgery for focal cortical dysplasia, 55
Balloon occlusion test
A patient-specific computer model to predict outcomes of the balloon occlusion test, 977
Ruptured vertebral artery dissection. Letters, 169, 170
Bariatric surgery
Resolution of pseudotumor cerebri after bariatric surgery for related obesity. Case report, 878
Basilar artery fenestration
Ruptured aneurysm arising from a basilar artery fenestration and associated with a persistent primitive hypoglossal artery. Case report and review of the literature, 532
Benign intracranial hypertension
Resolution of pseudotumor cerebri after bariatric surgery for related obesity. Case report, 878
Bilingual
Functional separation of languages in the bilingual brain: a comparison of electrical stimulation language mapping in 25 bilingual patients and 117 monolingual control patients, 449
Bilirubin
Bilirubin as a cerebrospinal fluid marker of sentinel subarachnoid hemorrhage: a preliminary report, 1026
Bipolar forceps
Bipolar forceps, 1082
Blisterlike aneurysm
Ruptured "blisterlike" aneurysm with a pseudoaneurysm formation requiring delayed intervention with endovascular coil embolization. Case report, 159
Spontaneous regression of an aneurysm at a nonbranching site of the supraclinoid internal carotid artery. Case report, 1070
Blood–brain barrier
Blood–brain barrier opened by stimulation of the parasympathetic sphenopalatine ganglion: a new method for macromolecule delivery to the brain, 303
Blood flow
Intraoperative infrared imaging of brain tumors, 960
Blood flow modeling
A patient-specific computer model to predict outcomes of the balloon occlusion test, 977
Blood transfusion
Blood transfusion and increased risk for vasospasm and poor outcome after subarachnoid hemorrhage, 1
Book review
de Devitiis E, Cappabianca P (eds). *Endoscopic Endonasal Transsphenoidal Surgery*, 167
Fager CA. *"Stop Talking to the Jury": Stories of a Medical Witness*, 888
Gray F, De Girolami U, Poirier J (eds). *Escourolle & Poirier Manual of Basic Neuropatholgy, ed 4*, 562
Haher TR, Merola AA (eds). *Surgical Techniques for the Spine*, 167
Haid RW Jr, Subach BR, Rodts GE Jr. *Advances in Spinal Stabilization*, 715
Kaech DL, Jinkins JR (eds). *Spinal Restabilization Procedures: Diagnostic and Therapeutic Aspects of Intervetebral Fusion Cages, Artificial Discs and Mobile Implants*, 1079
Kuroiwa T, Baethmann A, Czernicki Z, Hoff JT, Ito U, Katayama Y, Marmarou A, Mendelow AD, Reulen HJ (eds). *Brain Edema XII: Proceedings of the 12th International Symposium, Hakone, Japan, November 10–13, 2002, Acta Neurochirgurcica, Supplement 86*, 560
Loftus CM, Batjer HH (eds). Textbook of Neurological Surgery: Principles and Practice, Vols 1–4, 1078
Masur H. *Scales and Scores in Neurology*, 355
Morley TP. *Kenneth George McKenzie, 1892–1964: The Founding of Canadian Neurosurgery*, 1080
Myers EN, Suen JY, Meyers JN, Hanna EYN (eds). *Cancer of the Head and Neck, ed 4*, 354
Pickard JD, Di Rocco C, Dolenc VV, Fahlbusch R, Antunes JL, Sindou M, de Tribolet N, Tulleken CAF, Vapalahti M (eds). *Advances and Technical Standards in Neurosurgery, Vol 29*, 714
Seeger W. *Standard Variants of the Skull and Brain: Atlas for Neurosurgeons and Neuroradiologists*, 354
Simpson BA (ed). *Electrical Stimulation and the Relief of Pain, Vol 15*, 715
Watanabe K, Ito Y, Katayama S, Goto H (eds). *Developments in Neuroscience: Proceedings of the 3rd International Mt. Bandai Symposium for Neuroscience and the 4th Pan-Pacific Neurosurgery Congress in Hawaii Between 22 and 28 February 2003*, 888
Brachial plexus
Surgical repair of brachial plexus injury. Editorial, 361, 363

Surgical repair of brachial plexus injury: a multinational survey of experienced peripheral nerve surgeons, 365
Brachial plexus injury
Evaluation of suprascapular nerve neurotization after nerve graft or transfer in the treatment of brachial plexus traction lesions, 377
Brachial plexus repair
Contralateral motor rootlets and ipsilateral nerve transfers in brachial plexus reconstruction, 770
Bradycardia
Ictal bradycardia after endovascular treatment of an aneurysm. Case illustration, 546
Brain
Capillary hemangioma of the central nervous system, 73
Coerced training of the nondominant hand resulting in cortical reorganization: a high-field functional magnetic resonance imaging study, 310
Integration of biochemical images of a tumor into frameless stereotaxy achieved using a magnetic resonance imaging/magnetic resonance spectroscopy hybrid data set, 287
Music, musicians, and the brain: an exploration of musical genius. The 2004 Presidential address, 895
Technology in the resection of gliomas and the definition of madness. Editorial, 284, 286
Brain abscess
Brain abscess. Letters, 169
Brain injury
Effects of hyperbaric oxygen therapy on cerebral oxygenation and mitochondrial function following moderate lateral fluid-percussion injury in rats, 499
Brain mapping
Variability of intraoperative electrocortical stimulation mapping parameters across and within individuals, 458
Writing-specific sites in frontal areas: a cortical stimulation study, 787
Brain metabolism
Normobaric hyperoxia–induced improvement in cerebral metabolism and reduction in intracranial pressure in patients with severe head injury: a prospective historical cohort–matched study, 435
Brain model
The Brain Research Laboratory at the Cleveland Metropolitan General Hospital and Case Western Reserve University. Historical vignette, 881
Brain neoplasm
Craniotomy for supratentorial brain tumors: risk factors for brain swelling after opening the dura mater, 621
Gliomas following organ transplantation: analysis of the contents of a tumor registry, 932
Perfusion imaging of high-grade gliomas: a comparison between contrast harmonic and magnetic resonance imaging. Technical note, 700
Primary extraskeletal osteosarcoma in the pineal region. Case report, 1061
Stereotactic biopsy guidance in adults with supratentorial nonenhancing gliomas: role of perfusion-weighted magnetic resonance imaging, 970
Transition from meningeal melanocytoma to primary cerebral melanoma. Case report, 528
Brain Research Laboratory
The Brain Research Laboratory at the Cleveland Metropolitan General Hospital and Case Western Reserve University. Historical vignette, 881
Brain surgery
Complex visual hallucinations (Charles Bonnet syndrome) in visual field defects following cerebral surgery. Report of four cases, 846
Brain swelling
Craniotomy for supratentorial brain tumors: risk factors for brain swelling after opening the dura mater, 621
Brain temperature
Intraoperative infrared imaging of brain tumors, 960
Brain tumor
Distribution kinetics of targeted cytotoxin in glioma by bolus or convection-enhanced delivery in a murine model, 1004
Malignant progression in meningioma: documentation of a series and analysis of cytogenetic findings, 210
Brainstem
Postoperative evaluation of microsurgical resection for cavernous malformations of the brainstem, 607
1,3-Bis(2-cholorethyl)-1-nitrosourea
Invasive phenotype observed in 1,3-bis(2-chloroethyl)-1-nitrosourea–resistant sublines of 9L rat glioma cells: a tumor model mimicking a recurrent malignant glioma, 826
5-Bromodeoxyuridine
Transient focal cerebral ischemia–induced neurogenesis in the dentate gyrus of the adult mouse, 799

Capillary hemangioma
Capillary hemangioma of the central nervous system, 73
Carcinoid syndrome
A carcinoid tumor mimicking an isolated intracranial meningioma. Case report, 858
Carcinoid tumor
A carcinoid tumor mimicking an isolated intracranial meningioma. Case report, 858
Carcinoma
Intracranial metastatic parathyroid carcinoma. Case report and review of the literature, 1065
Cardiac pacemaker
Implantation of bilateral deep brain stimulator in two patients with Parkinson disease and preexisting cardiac pacemakers. Report of two cases, 1073
Carotid artery disease
Cost of treating high-risk symptomatic carotid artery stenosis: stent insertion and angioplasty compared with endarterectomy, 904
Carotid artery occlusion
Emergency stent placement for symptomatic acute carotid artery occlusion after endarterectomy. Case report, 151
Carotid endarterectomy
Risk of persistent cranial nerve injury after carotid endarterectomy, 445
Catecholaminergic fiber
Immunohistochemical determination of the sympathetic pathway in the orbit via the cranial nerves in humans, 1037
Cavernoma
Endotracheal tube electrodes to map and monitor activities of the vagus nerve intraoperatively. Technical note, 536
Cavernous hemangioma
Cavernous hemangioma extending to the extracranial, intracranial, and orbital regions. Case report, 1057
Cavernous malformation
Postoperative evaluation of microsurgical resection for cavernous malformations of the brainstem, 607
Cavernous sinus fistula
Persistent primitive trigeminal artery–cavernous sinus fistula with intracerebral hemorrhage: endovascular treatment using detachable coils in a transarterial double-catheter technique. Case report and review of the literature, 697
CD34
Recurrent intracranial solitary fibrous tumor with cerebrospinal fluid dissemination. Case report, 1045
Central area
Localization of hand sensory function to the pli de passage moyen of Broca, 278
Central nervous system
Whipple disease confined to the central nervous system presenting as a solitary frontal tumor. Case report, 336
Ceramide
Enhancement of C2-ceramide antitumor activity by small interfering RNA on X chromosome–linked inhibitor of apoptosis protein in resistant human glioma cells, 119

Cerebellomedullary fissure
Comparison of the transvermian and telovelar approaches to the fourth ventricle, 484
Cerebellopontine angle
Endoscope-assisted microsurgical resection of epidermoid tumors of the cerebellopontine angle, 227
Cerebellum
Comparison of the transvermian and telovelar approaches to the fourth ventricle, 484
Cerebral aneurysm
Bifurcation geometry and the presence of cerebral artery aneurysms, 108
Early surgery-related complications after aneurysm clip placement: an analysis of causes and patient outcomes, 600
Influence of aspirin on outcome following aneurysmal subarachnoid hemorrhage, 921
Spontaneous regression of an aneurysm at a nonbranching site of the supraclinoid internal carotid artery. Case report, 1070
Cerebral blood flow
A patient-specific computer model to predict outcomes of the balloon occlusion test, 977
Cerebral blood volume
Perfusion imaging of high-grade gliomas: a comparison between contrast harmonic and magnetic resonance imaging. Technical note, 700
Stereotactic biopsy guidance in adults with supratentorial nonenhancing gliomas: role of perfusion-weighted magnetic resonance imaging, 970
Cerebral circulation
Functional role of the Na^+/H^+ exchanger in the regulation of cerebral arteriolar tone in rats, 330
Cerebral contusion
Influence of apoptosis on neurological outcome following traumatic cerebral contusion, 233
Cerebral oxygenation
Cerebral oxygenation following decompressive hemicraniectomy for the treatment of refractory intracranial hypertension, 241
The effect of nimodipine on cerebral oxygenation in patients with poor-grade subarachnoid hemorrhage, 594
Cerebral vasospasm
Inhibition of cerebral vasospasm by intracranial delivery of ibuprofen from a controlled-release polymer in a rabbit model of subarachnoid hemorrhage, 93
Cerebral venous thrombosis
A transcranial approach for direct mechanical thrombectomy of dural sinus thrombosis. Report of two cases, 347
Cerebrospinal fluid
Quantitative analysis of radioisotope cisternography in the diagnosis of intracranial hypotension, 421
Cerebrospinal fluid dissemination
Recurrent intracranial solitary fibrous tumor with cerebrospinal fluid dissemination. Case report, 1045
Cerebrospinal fluid outflow resistance
Cerebrospinal fluid pulse pressure method: a possible substitute for the examination of B-waves, 944
Cerebrospinal fluid pleocytosis
Oculomotor palsy from an unruptured posterior communicating artery aneurysm presenting with cerebrospinal fluid pleocytosis and enhancement of the third cranial nerve. Case report, 352
Cerebrospinal fluid shunt
Cerebrospinal fluid shunt placement for pseudotumor cerebri–associated intractable headache: predictors of treatment response and an analysis of long-term outcomes, 627
Cerebrovascular circulation
Effects of arterial geometry on aneurysm growth: three-dimensional computational fluid dynamics study, 676
Cerebrovascular occlusive disease
Chorioretinal atrophy in a patient with moyamoya disease. Case report, 843
Cerebrovascular surgery
Harvey W. Cushing and cerebrovascular surgery: Part I, aneurysms. Historical vignette, 547
Harvey W. Cushing and cerebrovascular surgery: Part II, vascular malformations. Historical vignette, 553
Cerebrovascular system
Endoscopic anatomy of the chordae willisii in the superior sagittal sinus, 832
Cerebrum
Intracerebral pneumatocele presenting after air travel, 340
Charles Bonnet syndrome
Complex visual hallucinations (Charles Bonnet syndrome) in visual field defects following cerebral surgery. Report of four cases, 846
Chemotherapy
Mismatch repair protein hMSH2 in primary drug resistance in in vitro human malignant gliomas, 653
Chordae willisii
Endoscopic anatomy of the chordae willisii in the superior sagittal sinus, 832
Chorea
Striatal hyperintensity on T_1-weighted magnetic resonance images and high-density signal on CT scans obtained in patients with hyperglycemia and no involuntary movement. Report of two cases, 343
Chorioretinal atrophy
Chorioretinal atrophy in a patient with moyamoya disease. Case report, 843
Cisternography
Quantitative analysis of radioisotope cisternography in the diagnosis of intracranial hypotension, 421
Clip application
Intentional partial coil occlusion followed by delayed clip application of wide-necked middle cerebral artery aneurysms in patients presenting with severe vasospasm. Report of two cases, 154
Shunt-dependent hydrocephalus after rupture of intracranial aneurysms: a prospective study of the influence of treatment modality, 402
Simultaneous microscopic and endoscopic monitoring during surgery for internal carotid artery aneurysms, 989
Coil embolization
Ictal bradycardia after endovascular treatment of an aneurysm. Case illustration, 546
Persistent primitive trigeminal artery–cavernous sinus fistula with intracerebral hemorrhage: endovascular treatment using detachable coils in a transarterial double-catheter technique. Case report and review of the literature, 697
Coil occlusion
Intentional partial coil occlusion followed by delayed clip application of wide-necked middle cerebral artery aneurysms in patients presenting with severe vasospasm. Report of two cases, 154
Collagen IV
Acute alterations in microvascular basal lamina after subarachnoid hemorrhage, 633
Compliance
Cerebrospinal fluid pulse pressure method: a possible substitute for the examination of B-waves, 944
Computer-assisted image processing
Bifurcation geometry and the presence of cerebral artery aneurysms, 108
Computerized angiography
Incidence and risk factors for growth of unruptured cerebral aneurysms: observation using serial computerized tomography angiography, 908
Continous-flow shunt
Continuous-flow shunt for treatment of hydrocephalus due to lesions of the posterior fossa, 762

Continuous infusion
Distribution kinetics of targeted cytotoxin in glioma by bolus or convection-enhanced delivery in a murine model, 1004
Controlled-release polymer
Inhibition of cerebral vasospasm by intracranial delivery of ibuprofen from a controlled-release polymer in a rabbit model of subarachnoid hemorrhage, 93
Pharmacokinetics of controlled-release polymers in the subarachnoid space after subarachnoid hemorrhage in rabbits, 99
Convection-enhanced delivery
Distribution kinetics of targeted cytotoxin in glioma by bolus or convection-enhanced delivery in a murine model, 1004
A realistic brain tissue phantom for intraparenchymal infusion studies, 314
Cortical stimulation
Variability of intraoperative electrocortical stimulation mapping parameters across and within individuals, 458
Writing-specific sites in frontal areas: a cortical stimulation study, 787
Cost analysis
Cost of treating high-risk symptomatic carotid artery stenosis: stent insertion and angioplasty compared with endarterectomy, 904
Cranial nerve
Immunohistochemical determination of the sympathetic pathway in the orbit via the cranial nerves in humans, 1037
Cranial nerve injury
Risk of persistent cranial nerve injury after carotid endarterectomy, 445
Craniofacial resection
Craniofacial resections in the elderly: an outcome study, 935
Craniotomy
Craniotomy for supratentorial brain tumors: risk factors for brain swelling after opening the dura mater, 621
Creativity
Music, musicians, and the brain: an exploration of musical genius. The 2004 Presidential address, 895
CREST syndrome
Association of an irregularly anterior choroidal aneurysm with CREST syndrome. Case report, 854
Cushing disease
Secretion of high-molecular-weight adrenocorticotropic hormone from a pituitary adenoma in a patient without Cushing stigmata. Case report, 874
Cytogenetics
Malignant progression in meningioma: documentation of a series and analysis of cytogenetic findings, 210
Cytotoxin
Distribution kinetics of targeted cytotoxin in glioma by bolus or convection-enhanced delivery in a murine model, 1004

Deafferentation pain
Bilateral cortical stimulation for deafferentation pain after spinal cord injury. Case report, 687
Decompression surgery
Cerebral oxygenation following decompressive hemicraniectomy for the treatment of refractory intracranial hypertension, 241
Decompressive hemicraniectomy
Functional impairment, disability, and quality of life outcome after decompressive hemicraniectomy in malignant middle cerebral artery infarction, 248
Deep brain stimulation
Deep brain stimulation and psychosurgery. Editorial, 574, 575
Deep brain stimulation for dystonia confirming a somatotopic organization in the globus pallidus internus, 181
Deep brain stimulation for the treatment of parkinsonian, essential, and poststroke tremor: a suitable stimulation method and changes in effective stimulation intensity, 201
Deep brain stimulation of the ventral caudate nucleus in the treatment of obsessive–compulsive disorder and major depression. Case report, 682
Dystonia and deep brain stimulation. Editorial, 179
Electrical stimulation of the globus pallidus internus in patients with primary generalized dystonia: long-term results, 189
Implantation of bilateral deep brain stimulator in two patients with Parkinson disease and preexisting cardiac pacemakers. Report of two cases, 1073
Neurotransmitter release from high-frequency stimulation of the subthalamic nucleus, 511
Stimulation of the subthalamic nucleus compared with the globus pallidus internus in patients with Parkinson disease, 195
Stimulation of the subthalamic region for essential tremor, 48
Unilateral stimulation of the subthalamic nucleus in Parkinson disease: a double-blind 12-month evaluation study, 36
Dentate gyrus
Transient focal cerebral ischemia–induced neurogenesis in the dentate gyrus of the adult mouse, 799
Dexamethasone
Induction of the DNA repair gene *O^6-methylguanine–DNA methyltransferase* by dexamethasone in glioblastomas, 659
Diabetes insipidus
Resolution of diabetes insipidus following gamma knife surgery for a solitary metastasis to the pituitary stalk. Case report, 1053
Diabetes mellitus
Striatal hyperintensity on T_1-weighted magnetic resonance images and high-density signal on CT scans obtained in patients with hyperglycemia and no involuntary movement. Report of two cases, 343
Diffusion-tensor imaging
Diffusion-tensor imaging–guided tracking of fibers of the pyramidal tract combined with intraoperative cortical stimulation mapping in patients with gliomas, 66
Digital subtraction angiography
Bifurcation geometry and the presence of cerebral artery aneurysms, 108
Disease recurrence
Surgery for Rathke cleft cysts: technical considerations and outcomes, 577
Dissection
Pulsed holmium:yltrium-aluminum-garnet laser–induced liquid jet as a novel dissection device in neuroendoscopic surgery, 145
DNA mismatch repair
Mismatch repair protein hMSH2 in primary drug resistance in in vitro human malignant gliomas, 653
Dog
Endovascular treatment of intracranial aneurysms: comparative evaluation in a terminal bifurcation aneurysm model in dogs, 996
Dolichoectatic aneurysm
Prospective risk of hemorrhage in patients with vertebrobasilar nonsaccular intracranial aneurysm, 82
Dopamine
Neurotransmitter release from high-frequency stimulation of the subthalamic nucleus, 511
Drainage
Brain abscess. Letters, 169
Drug delivery
Pharmacokinetics of controlled-release polymers in the subarachnoid space after subarachnoid hemorrhage in rabbits, 99
Drug resistance
Mismatch repair protein hMSH2 in primary drug resistance in in vitro human malignant gliomas, 653
Dural arteriovenous fistula
Selective disconnection of cortical venous reflux as treatment for cranial dural arteriovenous fistulas, 31

Dural venous sinus
Resolution of pseudotumor cerebri after bariatric surgery for related obesity. Case report, 878
Dystonia
Deep brain stimulation for dystonia confirming a somatotopic organization in the globus pallidus internus, 181
Dystonia and deep brain stimulation. Editorial, 179
Dystonia. Letters, 719
Electrical stimulation of the globus pallidus internus in patients with primary generalized dystonia: long-term results, 189
DYT1
Electrical stimulation of the globus pallidus internus in patients with primary generalized dystonia: long-term results, 189

Elastance
Cerebrospinal fluid pulse pressure method: a possible substitute for the examination of B-waves, 944
Elderly
Craniofacial resections in the elderly: an outcome study, 935
Electrical stimulation
Blood–brain barrier opened by stimulation of the parasympathetic sphenopalatine ganglion: a new method for macromolecule delivery to the brain, 303
Electrocortical stimulation
Retinotopy with coordinates of lateral occipital cortex in humans, 114
Electrophysiological monitoring
Neurotransmitter release from high-frequency stimulation of the subthalamic nucleus, 511
Eloquent cortex
Variability of intraoperative electrocortical stimulation mapping parameters across and within individuals, 458
Embolization
Selective disconnection of cortical venous reflux as treatment for cranial dural arteriovenous fistulas, 31
Encephalitis
Whipple disease confined to the central nervous system presenting as a solitary frontal tumor. Case report, 336
Endarterectomy
Cost of treating high-risk symptomatic carotid artery stenosis: stent insertion and angioplasty compared with endarterectomy, 904
Emergency stent placement for symptomatic acute carotid artery occlusion after endarterectomy. Case report, 151
Endoscope
Simultaneous microscopic and endoscopic monitoring during surgery for internal carotid artery aneurysms, 989
Endotracheal tube electrode
Endotracheal tube electrodes to map and monitor activities of the vagus nerve intraoperatively. Technical note, 536
Endovascular occlusion
Giant fusiform intracranial A_2 aneurysm: endovascular and surgical treatment. Case illustration, 704
Endovascular therapy
Effects of arterial geometry on aneurysm growth: three-dimensional computational fluid dynamics study, 676
Endovascular treatment of intracranial aneurysms: comparative evaluation in a terminal bifurcation aneurysm model in dogs, 996
Monitoring of the lateral spread response in the endovascular treatment of a hemifacial spasm caused by an unruptured vertebral artery aneurysm. Case report, 861
Persistent primitive trigeminal artery–cavernous sinus fistula with intracerebral hemorrhage: endovascular treatment using detachable coils in a transarterial double-catheter technique. Case report and review of the literature, 697
Ruptured aneurysm arising from a basilar artery fenestration and associated with a persistent primitive hypoglossal artery. Case report and review of the literature, 532
Ruptured "blisterlike" aneurysm with a pseudoaneurysm formation requiring delayed intervention with endovascular coil embolization. Case report, 159
Shunt-dependent hydrocephalus after rupture of intracranial aneurysms: a prospective study of the influence of treatment modality, 402
Epidermoid
Endoscope-assisted microsurgical resection of epidermoid tumors of the cerebellopontine angle, 227
Epilepsy
Intracarotid Amytal memory test and hippocampal magnetic resonance imaging volumetry: validity of the Wada test as an indicator of hippocampal integrity among candidates for epilepsy surgery, 926
Mesial temporal lobe epilepsy: a proton magnetic resonance spectroscopy study and a histopathological analysis, 613
Epilepsy surgery
Anatomical landmarks for hemispherotomy and their clinical application, 747
Intracarotid Amytal memory test and hippocampal magnetic resonance imaging volumetry: validity of the Wada test as an indicator of hippocampal integrity among candidates for epilepsy surgery, 926
Long-term outcome after epilepsy surgery for focal cortical dysplasia, 55
Erdheim–Chester disease
Diagnosis of Erdheim–Chester disease by using computerized tomography–guided stereotactic biopsy of a caudate lesion. Case report, 521
Preoperative stent placement for intradural vertebral artery stenosis from a rare xanthogranuloma. Case report, 864
Essential tremor
Stimulation of the subthalamic region for essential tremor, 48
Esthesioneuroblastoma
Esthesioneuroblastoma of the pituitary gland: a clinicopathological entity? Case report and review of the literature, 1049
Etiology
Gliomas following organ transplantation: analysis of the contents of a tumor registry, 932
Exner area
Writing-specific sites in frontal areas: a cortical stimulation study, 787
Extradural tumor
A carcinoid tumor mimicking an isolated intracranial meningioma. Case report, 858
Extraskeletal osteosarcoma
Primary extraskeletal osteosarcoma in the pineal region. Case report, 1061

Fatigue
A quiet hand for microneurosurgery: twiddle your thumb. Technical note, 541
Fiber dissection
White matter fiber dissection of the optic radiations of the temporal lobe and implications for surgical approaches to the temporal horn, 739
Fiber track
Diffusion-tensor imaging–guided tracking of fibers of the pyramidal tract combined with intraoperative cortical stimulation mapping in patients with gliomas, 66
Fisher grade
Clot volume and clearance rate as independent predictors of vasospasm after aneurysmal subarachnoid hemorrhage, 255
Fluid-percussion injury
Effects of hyperbaric oxygen therapy on cerebral oxygenation and mitochondrial function following moderate lateral fluid-percussion injury in rats, 499
Focal cerebral ischemia
Neuroprotective effect of peroxynitrite decomposition catalyst and poly(adenosine diphosphate–ribose) polymerase

inhibitor alone and in combination in rats with focal cerebral ischemia, 669
Focal cortical displasia
Long-term outcome after epilepsy surgery for focal cortical dysplasia, 55
Foramen magnum tumor
Preoperative stent placement for intradural vertebral artery stenosis from a rare xanthogranuloma. Case report, 864
Fourth ventricle
Comparison of the transvermian and telovelar approaches to the fourth ventricle, 484
Fractionation
Radiosurgery and radiotherapy: observations and clarifications, 585
Functional magnetic resonance imaging
Coerced training of the nondominant hand resulting in cortical reorganization: a high-field functional magnetic resonance imaging study, 310
Localization of hand sensory function to the pli de passage moyen of Broca, 278
Tinnitis and auditory cortex. Letters, 171, 172
Functional outcome
Early surgery-related complications after aneurysm clip placement: an analysis of causes and patient outcomes, 600
Fusiform aneurysm
Prospective risk of hemorrhage in patients with vertebrobasilar nonsaccular intracranial aneurysm, 82

G93A transgenic mouse
Life span extension and reduced neuronal death after weekly intraventricular cyclosporin injections in the G93A transgenic mouse model of amytrophic lateral sclerosis, 128
Gamma knife
Leksell Gamma Knife coordinate setting slippage: how often, how much? 590
Gamma knife surgery
Analysis of nidus obliteration rates after gamma knife surgery for arteriovenous malformations based on long-term follow-up data: the University of Tokyo experience, 18
Proton magnetic resonance spectroscopy imaging in the evaluation of patients undergoing gamma knife surgery for Grade IV glioma, 467
Resolution of diabetes insipidus following gamma knife surgery for a solitary metastasis to the pituitary stalk. Case report, 1053
Gene regulation
Induction of the DNA repair gene *O^6-methylguanine–DNA methyltransferase* by dexamethasone in glioblastomas, 659
Gene therapy
Application of *p27* gene therapy for human malignant glioma potentiated by using mutant *p27*, 505
Giant cell glioblastoma multiforme
The influence of sex and the presence of giant cells on postoperative long-term survival in adult patients with supratentorial glioblastoma multiforme, 219
Giant fusiform intracranial aneurysm
Giant fusiform intracranial A_2 aneurysm: endovascular and surgical treatment. Case illustration, 704
Glial fibrillary acidic protein
Mesial temporal lobe epilepsy: a proton magnetic resonance spectroscopy study and a histopathological analysis, 613
Glioblastoma multiforme
Induction of the DNA repair gene *O^6-methylguanine–DNA methyltransferase* by dexamethasone in glioblastomas, 659
Mismatch repair protein hMSH2 in primary drug resistance in in vitro human malignant gliomas, 653
Glioma
Aurora-B dysfunction of multinucleated giant cells in glioma detected by site-specific phosphorylated antibodies, 1012
Enhancement of C2-ceramide antitumor activity by small interfering RNA on X chromosome–linked inhibitor of apoptosis protein in resistant human glioma cells, 119
Gliomas following organ transplantation: analysis of the contents of a tumor registry, 932
Integration of biochemical images of a tumor into frameless stereotaxy achieved using a magnetic resonance imaging/magnetic resonance spectroscopy hybrid data set, 287
Perfusion imaging of high-grade gliomas: a comparison between contrast harmonic and magnetic resonance imaging. Technical note, 700
Proton magnetic resonance spectroscopy imaging in the evaluation of patients undergoing gamma knife surgery for Grade IV glioma, 467
Stereotactic biopsy guidance in adults with supratentorial nonenhancing gliomas: role of perfusion-weighted magnetic resonance imaging, 970
Technology in the resection of gliomas and the definition of madness. Editorial, 284, 286
Globus pallidus
Deep brain stimulation for dystonia confirming a somatotopic organization in the globus pallidus internus, 181
Electrical stimulation of the globus pallidus internus in patients with primary generalized dystonia: long-term results, 189
Stimulation of the subthalamic nucleus compared with the globus pallidus internus in patients with Parkinson disease, 195
Glucose
Influence of oxygen therapy on glucose–lactate metabolism after diffuse brain injury, 323
Normobaric hyperoxia–induced improvement in cerebral metabolism and reduction in intracranial pressure in patients with severe head injury: a prospective historical cohort–matched study, 435
Gore-Tex
Seprafilm superior to Gore-Tex in the prevention of peridural fibrosis, 295
Grafting
Evaluation of suprascapular nerve neurotization after nerve graft or transfer in the treatment of brachial plexus traction lesions, 377
Growth
Incidence and risk factors for growth of unruptured cerebral aneurysms: observation using serial computerized tomography angiography, 908

Hand sensory function
Localization of hand sensory function to the pli de passage moyen of Broca, 278
Handedness
Coerced training of the nondominant hand resulting in cortical reorganization: a high-field functional magnetic resonance imaging study, 310
Harvey Cushing
Harvey W. Cushing and cerebrovascular surgery: Part I, aneurysms. Historical vignette, 547
Harvey W. Cushing and cerebrovascular surgery: Part II, vascular malformations. Historical vignette, 553
Pavlov and Cushing. Letters, 889, 890
Head injury
Effects of aminoguanidine and L-arginine methyl ester resuscitation following induction of fluid-percussion injury and severe controlled hemorrhagic shock in the rat brain, 138
Normobaric hyperoxia–induced improvement in cerebral metabolism and reduction in intracranial pressure in patients with severe head injury: a prospective historical cohort–matched study, 435
Head trauma
Prophylactic administration of ceftriaxone for the prevention of meningitis after traumatic pneumocephalus: results of a clinical trial, 757

Headache
Cerebrospinal fluid shunt placement for pseudotumor cerebri–associated intractable headache: predictors of treatment response and an analysis of long-term outcomes, 627
Hematoma
Atorvastatin reduction of intracranial hematoma volume in rats subjected to controlled cortical impact, 822
Impact of stereotactic hematoma evacuation on activities of daily living during the chronic period following spontaneous putaminal hemorrhage: a randomized study, 417
Hemicraniectomy
Cerebral oxygenation following decompressive hemicraniectomy for the treatment of refractory intracranial hypertension, 241
Hemifacial spasm
Monitoring of the lateral spread response in the endovascular treatment of a hemifacial spasm caused by an unruptured vertebral artery aneurysm. Case report, 861
Hemispherectomy
Anatomical landmarks for hemispherotomy and their clinical application, 747
Hemispheric dominance
Functional separation of languages in the bilingual brain: a comparison of electrical stimulation language mapping in 25 bilingual patients and 117 monolingual control patients, 449
Hemispherotomy
Anatomical landmarks for hemispherotomy and their clinical application, 747
Hemodynamics
Bifurcation geometry and the presence of cerebral artery aneurysms, 108
Effects of arterial geometry on aneurysm growth: three-dimensional computational fluid dynamics study, 676
Hemosiderin
Dotlike hemosiderin spots on T_2*-weighted magnetic resonance imaging as a predictor of stroke recurrence: a prospective study, 915
High-molecular-weight
Secretion of high-molecular-weight adrenocorticotropic hormone from a pituitary adenoma in a patient without Cushing stigmata. Case report, 874
Hippocampal sclerosis
Mesial temporal lobe epilepsy: a proton magnetic resonance spectroscopy study and a histopathological analysis, 613
Histiocytosis
Diagnosis of Erdheim–Chester disease by using computerized tomography–guided stereotactic biopsy of a caudate lesion. Case report, 521
Histone H3
Aurora-B dysfunction of multinucleated giant cells in glioma detected by site-specific phosphorylated antibodies, 1012
History of neurosurgery
Harvey W. Cushing and cerebrovascular surgery: Part II, vascular malformations. Historical vignette, 553
Human orbit
Immunohistochemical determination of the sympathetic pathway in the orbit via the cranial nerves in humans, 1037
Hunt and Kosnik Scale
Intracranial vertebral artery dissection with subarachnoid hemorrhage: clinical characteristics and outcomes in conservatively treated patients, 25
Hyaluronic acid
Reduction of neural adhesions by biodegradable autocross-linked hyaluronic acid gel after injury of peripheral nerves: an experimental study, 648
Hydrocephalus
Continuous-flow shunt for treatment of hydrocephalus due to lesions of the posterior fossa, 762
Shunt-dependent hydrocephalus after rupture of intracranial aneurysms: a prospective study of the influence of treatment modality, 402
Suprapineal recess: an alternate site for third ventriculostomy? Case report, 518
Treatment of hydrocephalus. Letters, 719, 720
HydroCoil
Endovascular treatment of intracranial aneurysms: comparative evaluation in a terminal bifurcation aneurysm model in dogs, 996
Hyperbaric oxygen
Effects of hyperbaric oxygen therapy on cerebral oxygenation and mitochondrial function following moderate lateral fluid-percussion injury in rats, 499
Hyperglycemia
Striatal hyperintensity on T_1-weighted magnetic resonance images and high-density signal on CT scans obtained in patients with hyperglycemia and no involuntary movement. Report of two cases, 343
Hyperoxia
Normobaric hyperoxia–induced improvement in cerebral metabolism and reduction in intracranial pressure in patients with severe head injury: a prospective historical cohort–matched study, 435
Hypoglycemia
Optimal blood glucose levels while using insulin to minimize the size of infarction in focal cerebral ischemia, 664
Hypophysitis
Primary hypophysitis: a single-center experience in 16 cases, 262
Hypothermia
The Brain Research Laboratory at the Cleveland Metropolitan General Hospital and Case Western Reserve University. Historical vignette, 881

Ibuprofen
Inhibition of cerebral vasospasm by intracranial delivery of ibuprofen from a controlled-release polymer in a rabbit model of subarachnoid hemorrhage, 93
Imaging-guided surgery
Comparison of the transvermian and telovelar approaches to the fourth ventricle, 484
Volumetric thermal devascularization of large meningiomas, 779
Immunohistochemical analysis
Immunohistochemical determination of the sympathetic pathway in the orbit via the cranial nerves in humans, 1037
Peripheral nerve regeneration by transplantation of bone marrow stromal cell–derived Schwann cells in adult rats, 806
Immunosuppression
Gliomas following organ transplantation: analysis of the contents of a tumor registry, 932
Infrared imaging
Intraoperative infrared imaging of brain tumors, 960
Infundibulum
Progression of a posterior communicating artery infundibulum into an aneurysm in a patient with Alagille syndrome. Case report, 694
Insulin
Optimal blood glucose levels while using insulin to minimize the size of infarction in focal cerebral ischemia, 664
Intercellular adhesion molecule–1
Detection of soluble intercellular adhesion molecule–1 and vascular cell adhesion molecule–1 in both cerebrospinal fluid and serum of patients after aneurysmal subarachnoid hemorrhage, 1030
Inhibition of cerebral vasospasm by intracranial delivery of ibuprofen from a controlled-release polymer in a rabbit model of subarachnoid hemorrhage, 93
Internal carotid artery
A patient-specific computer model to predict outcomes of the balloon occlusion test, 977
Spontaneous regression of an aneurysm at a nonbranching site of the supraclinoid internal carotid artery. Case report, 1070

Intracerebral hemorrhage
Dotlike hemosiderin spots on T_2*-weighted magnetic resonance imaging as a predictor of stroke recurrence: a prospective study, 915
Improvement in neurological outcome after administration of atorvastatin following experimental intracerebral hemorrhage in rats, 104
Persistent primitive trigeminal artery–cavernous sinus fistula with intracerebral hemorrhage: endovascular treatment using detachable coils in a transarterial double-catheter technique. Case report and review of the literature, 697
Pulsed holmium:yltrium-aluminum-garnet laser–induced liquid jet as a novel dissection device in neuroendoscopic surgery, 145
Intracerebral metastasis
Intracranial metastatic parathyroid carcinoma. Case report and review of the literature, 1065
Intracranial aneurysm
Endovascular treatment of intracranial aneurysms: comparative evaluation in a terminal bifurcation aneurysm model in dogs, 996
Oculomotor palsy from an unruptured posterior communicating artery aneurysm presenting with cerebrospinal fluid pleocytosis and enhancement of the third cranial nerve. Case report, 352
Progression of a posterior communicating artery infundibulum into an aneurysm in a patient with Alagille syndrome. Case report, 694
Role of apoptosis in intracranial aneurysm rupture, 1018
Simultaneous microscopic and endoscopic monitoring during surgery for internal carotid artery aneurysms, 989
Transradial approach for neuroendovascular surgery of intracranial vascular lesions, 767
Intracranial hypertension
Cerebrospinal fluid shunt placement for pseudotumor cerebri–associated intractable headache: predictors of treatment response and an analysis of long-term outcomes, 627
Quantitative analysis of radioisotope cisternography in the diagnosis of intracranial hypotension, 421
Relationship between intracranial pressure and other clinical variables in patients with aneurysmal subarachnoid hemorrhage, 408
Intracranial pressure
Cerebral oxygenation following decompressive hemicraniectomy for the treatment of refractory intracranial hypertension, 241
Cerebrospinal fluid pulse pressure method: a possible substitute for the examination of B-waves, 944
Craniotomy for supratentorial brain tumors: risk factors for brain swelling after opening the dura mater, 621
Relationship between intracranial pressure and other clinical variables in patients with aneurysmal subarachnoid hemorrhage, 408
Intracranial stenosis
Transradial approach for neuroendovascular surgery of intracranial vascular lesions, 767
Intracranial stent
Preoperative stent placement for intradural vertebral artery stenosis from a rare xanthogranuloma. Case report, 864
Intraoperative mapping
Endotracheal tube electrodes to map and monitor activities of the vagus nerve intraoperatively. Technical note, 536
Volumetric thermal devascularization of large meningiomas, 779
Intraoperative stimulation mapping
Diffusion-tensor imaging–guided tracking of fibers of the pyramidal tract combined with intraoperative cortical stimulation mapping in patients with gliomas, 66
Intrathecal drug infusion
Alpha$_2$-adrenergic receptor subtype specificity of intrathecally administered tizanidine used for analgesia for neuropathic pain, 641
Intraventricular hemorrhage
Fisher's classification. Letters, 356, 357
Intraventricular pressure
Continuous-flow shunt for treatment of hydrocephalus due to lesions of the posterior fossa, 762
Ischemia
Optimal blood glucose levels while using insulin to minimize the size of infarction in focal cerebral ischemia, 664
Isolated brain
The Brain Research Laboratory at the Cleveland Metropolitan General Hospital and Case Western Reserve University. Historical vignette, 881

Jugular foramen
Endotracheal tube electrodes to map and monitor activities of the vagus nerve intraoperatively. Technical note, 536

Lactate
Influence of oxygen therapy on glucose–lactate metabolism after diffuse brain injury, 323
Normobaric hyperoxia–induced improvement in cerebral metabolism and reduction in intracranial pressure in patients with severe head injury: a prospective historical cohort–matched study, 435
Lacunar infarction
Dotlike hemosiderin spots on T_2*-weighted magnetic resonance imaging as a predictor of stroke recurrence: a prospective study, 915
Language mapping
Functional separation of languages in the bilingual brain: a comparison of electrical stimulation language mapping in 25 bilingual patients and 117 monolingual control patients, 449
Lateral occipital lobe
Retinotopy with coordinates of lateral occipital cortex in humans, 114
Lateral spread response
Monitoring of the lateral spread response in the endovascular treatment of a hemifacial spasm caused by an unruptured vertebral artery aneurysm. Case report, 861
Leukocyte–endothelial cell interaction
Prevention of vasospasm by anti-CD11/CD18 monoclonal antibody therapy following subarachnoid hemorrhage in rabbits, 88
Long-term outcome
Analysis of nidus obliteration rates after gamma knife surgery for arteriovenous malformations based on long-term follow-up data: the University of Tokyo experience, 18
Long-term survival
The influence of sex and the presence of giant cells on postoperative long-term survival in adult patients with supratentorial glioblastoma multiforme, 219
Lumbar puncture
Bilirubin as a cerebrospinal fluid marker of sentinel subarachnoid hemorrhage: a preliminary report, 1026
Lumboperitoneal shunt
Resolution of pseudotumor cerebri after bariatric surgery for related obesity. Case report, 878

Macaca fascicularis
Association between cerebrospinal fluid levels of asymmetric dimethyl-L-arginine, an endogenous inhibitor of endothelial nitric oxide synthase, and cerebral vasospasm in a primate model of subarachnoid hemorrhage, 836
Magnetic resonance angiography
Detailed anatomy of the motor and sensory roots of the trigeminal nerve and their neurovascular relationships: a magnetic resonance imaging study, 427

Magnetic resonance imaging
Cavernous hemangioma extending to the extracranial, intracranial, and orbital regions. Case report, 1057
Deep brain stimulation for dystonia confirming a somatotopic organization in the globus pallidus internus, 181
Detailed anatomy of the motor and sensory roots of the trigeminal nerve and their neurovascular relationships: a magnetic resonance imaging study, 427
Dystonia. Letters, 719
Intracarotid Amytal memory test and hippocampal magnetic resonance imaging volumetry: validity of the Wada test as an indicator of hippocampal integrity among candidates for epilepsy surgery, 926
Oculomotor palsy from an unruptured posterior communicating artery aneurysm presenting with cerebrospinal fluid pleocytosis and enhancement of the third cranial nerve. Case report, 352
A patient-specific computer model to predict outcomes of the balloon occlusion test, 977
Rathke cleft cyst. Editorial, 571, 572
Stereotactic biopsy guidance in adults with supratentorial nonenhancing gliomas: role of perfusion-weighted magnetic resonance imaging, 970
Magnetic resonance spectroscopy
Integration of biochemical images of a tumor into frameless stereotaxy achieved using a magnetic resonance imaging/magnetic resonance spectroscopy hybrid data set, 287
Mesial temporal lobe epilepsy: a proton magnetic resonance spectroscopy study and a histopathological analysis, 613
Proton magnetic resonance spectroscopy imaging in the evaluation of patients undergoing gamma knife surgery for Grade IV glioma, 467
Major depression
Deep brain stimulation of the ventral caudate nucleus in the treatment of obsessive–compulsive disorder and major depression. Case report, 682
Malformation of cortical development
Long-term outcome after epilepsy surgery for focal cortical dysplasia, 55
Malignant glioma
Application of *p27* gene therapy for human malignant glioma potentiated by using mutant *p27*, 505
Malignant meningioma
Malignant progression in meningioma: documentation of a series and analysis of cytogenetic findings, 210
Mannitol
High-dose mannitol. Letters, 566, 567, 568
Matrix metalloproteinase
Acute alterations in microvascular basal lamina after subarachnoid hemorrhage, 633
Maximum tolerated dose
Distribution kinetics of targeted cytotoxin in glioma by bolus or convection-enhanced delivery in a murine model, 1004
Melanocytoma
Transition from meningeal melanocytoma to primary cerebral melanoma. Case report, 528
Melanoma
Transition from meningeal melanocytoma to primary cerebral melanoma. Case report, 528
Memory
Intracarotid Amytal memory test and hippocampal magnetic resonance imaging volumetry: validity of the Wada test as an indicator of hippocampal integrity among candidates for epilepsy surgery, 926
Meningioma
A carcinoid tumor mimicking an isolated intracranial meningioma. Case report, 858
Transition from meningeal melanocytoma to primary cerebral melanoma. Case report, 528
Volumetric thermal devascularization of large meningiomas, 779
Metastasis
Resolution of diabetes insipidus following gamma knife surgery for a solitary metastasis to the pituitary stalk. Case report, 1053
Meyer loop
White matter fiber dissection of the optic radiations of the temporal lobe and implications for surgical approaches to the temporal horn, 739
MIB-1
Recurrent intracranial solitary fibrous tumor with cerebrospinal fluid dissemination. Case report, 1045
Microsurgery
Endoscope-assisted microsurgical resection of epidermoid tumors of the cerebellopontine angle, 227
Simultaneous microscopic and endoscopic monitoring during surgery for internal carotid artery aneurysms, 989
Microsurgical anatomy
Anatomical landmarks for hemispherotomy and their clinical application, 747
Comparison of the transvermian and telovelar approaches to the fourth ventricle, 484
Microvessel
Acute alterations in microvascular basal lamina after subarachnoid hemorrhage, 633
Middle cerebral artery aneurysm
Intentional partial coil occlusion followed by delayed clip application of wide-necked middle cerebral artery aneurysms in patients presenting with severe vasospasm. Report of two cases, 154
Middle cerebral artery occlusion
Transient focal cerebral ischemia–induced neurogenesis in the dentate gyrus of the adult mouse, 799
Minimally invasive surgery
Simultaneous microscopic and endoscopic monitoring during surgery for internal carotid artery aneurysms, 989
Mitochondria
Effects of hyperbaric oxygen therapy on cerebral oxygenation and mitochondrial function following moderate lateral fluid-percussion injury in rats, 499
Enhancement of C2-ceramide antitumor activity by small interfering RNA on X chromosome–linked inhibitor of apoptosis protein in resistant human glioma cells, 119
Life span extension and reduced neuronal death after weekly intraventricular cyclosporin injections in the G93A transgenic mouse model of amytrophic lateral sclerosis, 128
Monolingual
Functional separation of languages in the bilingual brain: a comparison of electrical stimulation language mapping in 25 bilingual patients and 117 monolingual control patients, 449
Morphology
Do the morphological characteristics of arteriovenous malformations affect the results of radiosurgery? 393
Mortality rate
Early surgery-related complications after aneurysm clip placement: an analysis of causes and patient outcomes, 600
Motor cortex stimulation
Bilateral cortical stimulation for deafferentation pain after spinal cord injury. Case report, 687
Motor evoked potentials
Motor evoked potentials. Letters, 564
Motor reinnervation
Contralateral motor rootlets and ipsilateral nerve transfers in brachial plexus reconstruction, 770
Motor rootlet
Contralateral motor rootlets and ipsilateral nerve transfers in brachial plexus reconstruction, 770
Mouse
Distribution kinetics of targeted cytotoxin in glioma by bolus or convection-enhanced delivery in a murine model, 1004

Transient focal cerebral ischemia–induced neurogenesis in the dentate gyrus of the adult mouse, 799
Movement disorder
Tremor cells in the human thalamus: differences among neurological disorders, 43
Moyamoya disease
Chorioretinal atrophy in a patient with moyamoya disease. Case report, 843
Hemorrhage from moyamoya-like vessels associated with a cerebral arteriovenous malformation. Case report, 869
Multinucleated giant cell
Aurora-B dysfunction of multinucleated giant cells in glioma detected by site-specific phosphorylated antibodies, 1012
Multivariate analysis
Impact of stereotactic hematoma evacuation on activities of daily living during the chronic period following spontaneous putaminal hemorrhage: a randomized study, 417
Music
Music, musicians, and the brain: an exploration of musical genius. The 2004 Presidential address, 895
Musician
Music, musicians, and the brain: an exploration of musical genius. The 2004 Presidential address, 895
Mutant *p27*
Application of *p27* gene therapy for human malignant glioma potentiated by using mutant *p27*, 505

N-acetylaspartate
Mesial temporal lobe epilepsy: a proton magnetic resonance spectroscopy study and a histopathological analysis, 613
Na^+/Ca^{++} exchanger
Functional role of the Na^+/H^+ exchanger in the regulation of cerebral arteriolar tone in rats, 330
Na^+/H^+ exchanger
Functional role of the Na^+/H^+ exchanger in the regulation of cerebral arteriolar tone in rats, 330
Na^+/K^+–adenosine triphosphate
Functional role of the Na^+/H^+ exchanger in the regulation of cerebral arteriolar tone in rats, 330
Natural history
Incidence and risk factors for growth of unruptured cerebral aneurysms: observation using serial computerized tomography angiography, 908
Neoplasm
Diffusion-tensor imaging–guided tracking of fibers of the pyramidal tract combined with intraoperative cortical stimulation mapping in patients with gliomas, 66
Nerve action potential discharge
Pathophysiology of trigeminal neuralgia: new evidence from a trigeminal ganglion intraoperative microneurographic recording. Case report, 872
Nerve conduction velocity
Peripheral nerve regeneration by transplantation of bone marrow stromal cell–derived Schwann cells in adult rats, 806
Nerve graft
Contralateral motor rootlets and ipsilateral nerve transfers in brachial plexus reconstruction, 770
Management and outcomes in 353 surgically treated sciatic nerve lesions, 8
Nerve injury
Surgical repair of brachial plexus injury: a multinational survey of experienced peripheral nerve surgeons, 365
Nerve repair
Management and outcomes in 353 surgically treated sciatic nerve lesions, 8
Nerve transfer
Contralateral motor rootlets and ipsilateral nerve transfers in brachial plexus reconstruction, 770
Evaluation of suprascapular nerve neurotization after nerve graft or transfer in the treatment of brachial plexus traction lesions, 377
Neuritis
Neuritis ossificans of the sciatic nerve. Case illustration, 545
Neurodegenerative disease
Life span extension and reduced neuronal death after weekly intraventricular cyclosporin injections in the G93A transgenic mouse model of amytrophic lateral sclerosis, 128
Neuroendocrine carcinoma
A carcinoid tumor mimicking an isolated intracranial meningioma. Case report, 858
Neuroendocrinology
Large anterior skull base lesions in patients presenting with obstructive sleep apnea. Report of two cases and review of the literature, 163
Neuroendoscopy
Endoscope-assisted microsurgical resection of epidermoid tumors of the cerebellopontine angle, 227
Pulsed holmium:yltrium-aluminum-garnet laser–induced liquid jet as a novel dissection device in neuroendoscopic surgery, 145
Suprapineal recess: an alternate site for third ventriculostomy? Case report, 518
Neuroendovascular surgery
Preoperative stent placement for intradural vertebral artery stenosis from a rare xanthogranuloma. Case report, 864
Transradial approach for neuroendovascular surgery of intracranial vascular lesions, 767
Neurolysis
Management and outcomes in 353 surgically treated sciatic nerve lesions, 8
Neuronavigation
Integration of biochemical images of a tumor into frameless stereotaxy achieved using a magnetic resonance imaging/magnetic resonance spectroscopy hybrid data set, 287
Neuropathic pain
Alpha$_2$-adrenergic receptor subtype specificity of intrathecally administered tizanidine used for analgesia for neuropathic pain, 641
Neuropathology
William Osler at McGill University: the Baby Professor and his early contributions to neurosurgery. Historical vignette, 705
Neuroprotection
Neuroprotective effect of peroxynitrite decomposition catalyst and poly(adenosine diphosphate–ribose) polymerase inhibitor alone and in combination in rats with focal cerebral ischemia, 669
Neuropsychology
Intracarotid Amytal memory test and hippocampal magnetic resonance imaging volumetry: validity of the Wada test as an indicator of hippocampal integrity among candidates for epilepsy surgery, 926
Neurosurgery
Music, musicians, and the brain: an exploration of musical genius. The 2004 Presidential address, 895
Radiosurgery and radiotherapy: observations and clarifications, 585
Selective disconnection of cortical venous reflux as treatment for cranial dural arteriovenous fistulas, 31
William Osler at McGill University: the Baby Professor and his early contributions to neurosurgery. Historical vignette, 705
Neurosurgical history
Harvey W. Cushing and cerebrovascular surgery: Part I, aneurysms. Historical vignette, 547
William Osler at McGill University: the Baby Professor and his early contributions to neurosurgery. Historical vignette, 705
Neurosurgical operation
Bipolar forceps, 1082
Neurotization
Evaluation of suprascapular nerve neurotization after nerve graft or transfer in the treatment of brachial plexus traction lesions, 377

Neurovascular contact
Detailed anatomy of the motor and sensory roots of the trigeminal nerve and their neurovascular relationships: a magnetic resonance imaging study, 427
Nimodipine
The effect of nimodipine on cerebral oxygenation in patients with poor-grade subarachnoid hemorrhage, 594
Nitric oxide
Association between cerebrospinal fluid levels of asymmetric dimethyl-L-arginine, an endogenous inhibitor of endothelial nitric oxide synthase, and cerebral vasospasm in a primate model of subarachnoid hemorrhage, 836
Blood transfusion and increased risk for vasospasm and poor outcome after subarachnoid hemorrhage, 1
Effects of aminoguanidine and L-arginine methyl ester resuscitation following induction of fluid-percussion injury and severe controlled hemorrhagic shock in the rat brain, 138
Nitric oxide synthase
Association between cerebrospinal fluid levels of asymmetric dimethyl-L-arginine, an endogenous inhibitor of endothelial nitric oxide synthase, and cerebral vasospasm in a primate model of subarachnoid hemorrhage, 836
Effects of aminoguanidine and L-arginine methyl ester resuscitation following induction of fluid-percussion injury and severe controlled hemorrhagic shock in the rat brain, 138
Functional role of the Na^+/H^+ exchanger in the regulation of cerebral arteriolar tone in rats, 330
Nonketotic hyperglycemia
Striatal hyperintensity on T_1-weighted magnetic resonance images and high-density signal on CT scans obtained in patients with hyperglycemia and no involuntary movement. Report of two cases, 343
Normal-pressure hydrocephalus
Cerebrospinal fluid pulse pressure method: a possible substitute for the examination of B-waves, 944
Normal-pressure hydrocephalus, 1083
Normoglycemia
Optimal blood glucose levels while using insulin to minimize the size of infarction in focal cerebral ischemia, 664
Nucleus accumbens
Deep brain stimulation of the ventral caudate nucleus in the treatment of obsessive–compulsive disorder and major depression. Case report, 682

O^6-methylguanine–DNA methyltransferase
Induction of the DNA repair gene *O^6-methylguanine–DNA methyltransferase* by dexamethasone in glioblastomas, 659
Obesity
Resolution of pseudotumor cerebri after bariatric surgery for related obesity. Case report, 878
Obliteration rate
Analysis of nidus obliteration rates after gamma knife surgery for arteriovenous malformations based on long-term follow-up data: the University of Tokyo experience, 18
Obsessive–compulsive disorder
Deep brain stimulation of the ventral caudate nucleus in the treatment of obsessive–compulsive disorder and major depression. Case report, 682
Obstructive sleep apnea
Large anterior skull base lesions in patients presenting with obstructive sleep apnea. Report of two cases and review of the literature, 163
Oculomotor nerve
Oculomotor palsy from an unruptured posterior communicating artery aneurysm presenting with cerebrospinal fluid pleocytosis and enhancement of the third cranial nerve. Case report, 352
Optic nerve sheath meningioma
Surgical management of meningiomas involving the optic nerve sheath, 951
Optic radiation
White matter fiber dissection of the optic radiations of the temporal lobe and implications for surgical approaches to the temporal horn, 739
Orbital meningioma
Surgical management of meningiomas involving the optic nerve sheath, 951
Orbital tumor
Cavernous hemangioma extending to the extracranial, intracranial, and orbital regions. Case report, 1057
Organ transplantation
Gliomas following organ transplantation: analysis of the contents of a tumor registry, 932
Ossification
Neuritis ossificans of the sciatic nerve. Case illustration, 545
Osteoma
Intracerebral pneumatocele presenting after air travel, 340
Outcome
Craniofacial resections in the elderly: an outcome study, 935
Functional impairment, disability, and quality of life outcome after decompressive hemicraniectomy in malignant middle cerebral artery infarction, 248
High-dose mannitol. Letters, 566, 567, 568
Influence of apoptosis on neurological outcome following traumatic cerebral contusion, 233
Long-term outcome after epilepsy surgery for focal cortical dysplasia, 55
Relationship between intracranial pressure and other clinical variables in patients with aneurysmal subarachnoid hemorrhage, 408
Selective disconnection of cortical venous reflux as treatment for cranial dural arteriovenous fistulas, 31
Oxygen
Influence of oxygen therapy on glucose–lactate metabolism after diffuse brain injury, 323

p27
Application of *p27* gene therapy for human malignant glioma potentiated by using mutant *p27*, 505
Pain
Pathophysiology of trigeminal neuralgia: new evidence from a trigeminal ganglion intraoperative microneurographic recording. Case report, 872
Parasympathetic nervous system
Blood–brain barrier opened by stimulation of the parasympathetic sphenopalatine ganglion: a new method for macromolecule delivery to the brain, 303
Parathyroid
Intracranial metastatic parathyroid carcinoma. Case report and review of the literature, 1065
Parenchymal lesion
Intracerebral pneumatocele presenting after air travel, 340
Parkinson disease
Implantation of bilateral deep brain stimulator in two patients with Parkinson disease and preexisting cardiac pacemakers. Report of two cases, 1073
Life span extension and reduced neuronal death after weekly intraventricular cyclosporin injections in the G93A transgenic mouse model of amytrophic lateral sclerosis, 128
Neurotransmitter release from high-frequency stimulation of the subthalamic nucleus, 511
Stimulation of the subthalamic nucleus compared with the globus pallidus internus in patients with Parkinson disease, 195
Tremor cells in the human thalamus: differences among neurological disorders, 43
Unilateral stimulation of the subthalamic nucleus in Parkinson disease: a double-blind 12-month evaluation study, 36
Peak force
Reduction of neural adhesions by biodegradable autocross-linked hyaluronic acid gel after injury of peripheral nerves: an experimental study, 648

Perfusion imaging
Perfusion imaging of high-grade gliomas: a comparison between contrast harmonic and magnetic resonance imaging. Technical note, 700
Stereotactic biopsy guidance in adults with supratentorial nonenhancing gliomas: role of perfusion-weighted magnetic resonance imaging, 970
Peridural fibrosis
Seprafilm superior to Gore-Tex in the prevention of peridural fibrosis, 295
Peripheral nerve
Neuritis ossificans of the sciatic nerve. Case illustration, 545
Reduction of neural adhesions by biodegradable autocrosslinked hyaluronic acid gel after injury of peripheral nerves: an experimental study, 648
Surgical repair of brachial plexus injury: a multinational survey of experienced peripheral nerve surgeons, 365
Peripheral nervous system
Pathophysiology of trigeminal neuralgia: new evidence from a trigeminal ganglion intraoperative microneurographic recording. Case report, 872
Peroxynitrite decomposition catalyst
Neuroprotective effect of peroxynitrite decomposition catalyst and poly(adenosine diphosphate–ribose) polymerase inhibitor alone and in combination in rats with focal cerebral ischemia, 669
Persistent primitive trigeminal artery
Persistent primitive trigeminal artery–cavernous sinus fistula with intracerebral hemorrhage: endovascular treatment using detachable coils in a transarterial double-catheter technique. Case report and review of the literature, 697
Pharmacokinetics
Quantitative analysis of radioisotope cisternography in the diagnosis of intracranial hypotension, 421
Phosphorylation
Aurora-B dysfunction of multinucleated giant cells in glioma detected by site-specific phosphorylated antibodies, 1012
Photodynamic therapy
Quantification of in vivo Photofrin uptake by human pituitary adenoma tissue, 272
Pineal gland
Primary extraskeletal osteosarcoma in the pineal region. Case report, 1061
Pituitary
Primary hypophysitis: a single-center experience in 16 cases, 262
Surgery for Rathke cleft cysts: technical considerations and outcomes, 577
Pituitary adenoma
Quantification of in vivo Photofrin uptake by human pituitary adenoma tissue, 272
Secretion of high-molecular-weight adrenocorticotropic hormone from a pituitary adenoma in a patient without Cushing stigmata. Case report, 874
Pituitary gland
Esthesioneuroblastoma of the pituitary gland: a clinicopathological entity? Case report and review of the literature, 1049
Pituitary stalk
Resolution of diabetes insipidus following gamma knife surgery for a solitary metastasis to the pituitary stalk. Case report, 1053
Pneumatocele
Intracerebral pneumatocele presenting after air travel, 340
Pneumocephalus
Prophylactic administration of ceftriaxone for the prevention of meningitis after traumatic pneumocephalus: results of a clinical trial, 757
Poly(adenosine diphosphate–ribose) polymerase
Neuroprotective effect of peroxynitrite decomposition catalyst and poly(adenosine diphosphate–ribose) polymerase inhibitor alone and in combination in rats with focal cerebral ischemia, 669
Porphyrin uptake
Quantification of in vivo Photofrin uptake by human pituitary adenoma tissue, 272
Positive pressure infusion
A realistic brain tissue phantom for intraparenchymal infusion studies, 314
Positron emission tomography
Combined use of ^{18}F-fluorodeoxyglucose and ^{11}C-methionine in 45 positron emission tomography–guided stereotactic brain biopsies, 476
Localization of hand sensory function to the pli de passage moyen of Broca, 278
Posterior fossa tumor
Comparison of the transvermian and telovelar approaches to the fourth ventricle, 484
Continuous-flow shunt for treatment of hydrocephalus due to lesions of the posterior fossa, 762
Primitive hypoglossal artery
Ruptured aneurysm arising from a basilar artery fenestration and associated with a persistent primitive hypoglossal artery. Case report and review of the literature, 532
Progenitor cell proliferation
Transient focal cerebral ischemia–induced neurogenesis in the dentate gyrus of the adult mouse, 799
Prognosis
A transcranial approach for direct mechanical thrombectomy of dural sinus thrombosis. Report of two cases, 347
Progressive disease
Malignant progression in meningioma: documentation of a series and analysis of cytogenetic findings, 210
Progressive systemic sclerosis
Association of an irregularly anterior choroidal aneurysm with CREST syndrome. Case report, 854
Pseudoaneurysm cavity
Ruptured "blisterlike" aneurysm with a pseudoaneurysm formation requiring delayed intervention with endovascular coil embolization. Case report, 159
Pseudotumor cerebri
Cerebrospinal fluid shunt placement for pseudotumor cerebri–associated intractable headache: predictors of treatment response and an analysis of long-term outcomes, 627
Resolution of pseudotumor cerebri after bariatric surgery for related obesity. Case report, 878
Psychosurgery
Deep brain stimulation and psychosurgery. Editorial, 574, 575

Quiet hand technique
A quiet hand for microneurosurgery: twiddle your thumb. Technical note, 541

Rabbit
Pharmacokinetics of controlled-release polymers in the subarachnoid space after subarachnoid hemorrhage in rabbits, 99
Prevention of vasospasm by anti-CD11/CD18 monoclonal antibody therapy following subarachnoid hemorrhage in rabbits, 88
Radiofrequency thermal ablation
Volumetric thermal devascularization of large meningiomas, 779
Radioisotope
Quantitative analysis of radioisotope cisternography in the diagnosis of intracranial hypotension, 421
Radioisotope scanning
Combined use of ^{18}F-fluorodeoxyglucose and ^{11}C-methionine in 45 positron emission tomography–guided stereotactic brain biopsies, 476
Radiosurgery
Do the morphological characteristics of arteriovenous malformations affect the results of radiosurgery? 393

Primary hypophysitis: a single-center experience in 16 cases, 262
Radiosurgery and radiotherapy. Editorial, 573
Radiosurgery and radiotherapy: observations and clarifications, 585
Radiosurgery for arteriovenous malformations. Editorial, 390, 392
Radiotherapy
Radiosurgery and radiotherapy. Editorial, 573
Radiosurgery and radiotherapy: observations and clarifications, 585
Surgical management of meningiomas involving the optic nerve sheath, 951
Randomized trial
Impact of stereotactic hematoma evacuation on activities of daily living during the chronic period following spontaneous putaminal hemorrhage: a randomized study, 417
Rat
Alpha$_2$-adrenergic receptor subtype specificity of intrathecally administered tizanidine used for analgesia for neuropathic pain, 641
Atorvastatin reduction of intracranial hematoma volume in rats subjected to controlled cortical impact, 822
Atorvastatin reduction of intravascular thrombosis, increase in cerebral microvascular patency and integrity, and enhancement of spatial learning in rats subjected to traumatic brain injury, 813
Blood–brain barrier opened by stimulation of the parasympathetic sphenopalatine ganglion: a new method for macromolecule delivery to the brain, 303
Effects of hyperbaric oxygen therapy on cerebral oxygenation and mitochondrial function following moderate lateral fluid-percussion injury in rats, 499
Improvement in neurological outcome after administration of atorvastatin following experimental intracerebral hemorrhage in rats, 104
Influence of oxygen therapy on glucose–lactate metabolism after diffuse brain injury, 323
Invasive phenotype observed in 1,3-bis(2-chloroethyl)-1-nitrosourea–resistant sublines of 9L rat glioma cells: a tumor model mimicking a recurrent malignant glioma, 826
Optimal blood glucose levels while using insulin to minimize the size of infarction in focal cerebral ischemia, 664
Peripheral nerve regeneration by transplantation of bone marrow stromal cell–derived Schwann cells in adult rats, 806
Reduction of neural adhesions by biodegradable autocross-linked hyaluronic acid gel after injury of peripheral nerves: an experimental study, 648
Rathke cleft cyst
Rathke cleft cyst. Editorial, 571, 572
Surgery for Rathke cleft cysts: technical considerations and outcomes, 577
Rebleeding
Influence of aspirin on outcome following aneurysmal subarachnoid hemorrhage, 921
Receptor subtype
Alpha$_2$-adrenergic receptor subtype specificity of intrathecally administered tizanidine used for analgesia for neuropathic pain, 641
Recurrence
Dotlike hemosiderin spots on T_2*-weighted magnetic resonance imaging as a predictor of stroke recurrence: a prospective study, 915
Recurrent hemorrhage
Postoperative evaluation of microsurgical resection for cavernous malformations of the brainstem, 607
Relative pulse pressure coefficient
Cerebrospinal fluid pulse pressure method: a possible substitute for the examination of B-waves, 944
Remyelination
Peripheral nerve regeneration by transplantation of bone marrow stromal cell–derived Schwann cells in adult rats, 806
Repeated surgery
Surgery for Rathke cleft cysts: technical considerations and outcomes, 577
Resection
Postoperative evaluation of microsurgical resection for cavernous malformations of the brainstem, 607
Retinotopy
Retinotopy with coordinates of lateral occipital cortex in humans, 114
Rigid endoscopy
Endoscopic anatomy of the chordae willisii in the superior sagittal sinus, 832
Risk factor
Bifurcation geometry and the presence of cerebral artery aneurysms, 108
Craniotomy for supratentorial brain tumors: risk factors for brain swelling after opening the dura mater, 621
Dotlike hemosiderin spots on T_2*-weighted magnetic resonance imaging as a predictor of stroke recurrence: a prospective study, 915
Risk of persistent cranial nerve injury after carotid endarterectomy, 445
Robotic surgery
Pulsed holmium:yltrium-aluminum-garnet laser–induced liquid jet as a novel dissection device in neuroendoscopic surgery, 145
Ruptured aneurysm
Progression of a posterior communicating artery infundibulum into an aneurysm in a patient with Alagille syndrome. Case report, 694

Scar
Seprafilm superior to Gore-Tex in the prevention of peridural fibrosis, 295
Sciatic nerve
Management and outcomes in 353 surgically treated sciatic nerve lesions, 8
Peripheral nerve regeneration by transplantation of bone marrow stromal cell–derived Schwann cells in adult rats, 806
Scleroderma
Association of an irregularly anterior choroidal aneurysm with CREST syndrome. Case report, 854
Seizure
Ictal bradycardia after endovascular treatment of an aneurysm. Case illustration, 546
Seprafilm
Seprafilm superior to Gore-Tex in the prevention of peridural fibrosis, 295
Severe head injury
Influence of oxygen therapy on glucose–lactate metabolism after diffuse brain injury, 323
Shock wave
Pulsed holmium:yltrium-aluminum-garnet laser–induced liquid jet as a novel dissection device in neuroendoscopic surgery, 145
Shunt
Normal-pressure hydrocephalus, 1083
Shunt-dependent hydrocephalus after rupture of intracranial aneurysms: a prospective study of the influence of treatment modality, 402
Shunt complication
Continuous-flow shunt for treatment of hydrocephalus due to lesions of the posterior fossa, 762
Skull base tumor
Large anterior skull base lesions in patients presenting with obstructive sleep apnea. Report of two cases and review of the literature, 163

Slippage phenomenon
Leksell Gamma Knife coordinate setting slippage: how often, how much? 590
Small interfering RNA
Enhancement of C2-ceramide antitumor activity by small interfering RNA on X chromosome–linked inhibitor of apoptosis protein in resistant human glioma cells, 119
Solitary fibrous tumor
Recurrent intracranial solitary fibrous tumor with cerebrospinal fluid dissemination. Case report, 1045
Spatial memory
Atorvastatin reduction of intravascular thrombosis, increase in cerebral microvascular patency and integrity, and enhancement of spatial learning in rats subjected to traumatic brain injury, 813
Sphenopalatine ganglion
Blood–brain barrier opened by stimulation of the parasympathetic sphenopalatine ganglion: a new method for macromolecule delivery to the brain, 303
Spinal cord
Capillary hemangioma of the central nervous system, 73
Spinal cord injury
Bilateral cortical stimulation for deafferentation pain after spinal cord injury. Case report, 687
Spontaneous putaminal hemorrhage
Impact of stereotactic hematoma evacuation on activities of daily living during the chronic period following spontaneous putaminal hemorrhage: a randomized study, 417
Spontaneous regression
Spontaneous regression of an aneurysm at a nonbranching site of the supraclinoid internal carotid artery. Case report, 1070
Spontaneous thrombosis
Cerebral venous angioma of the pons complicated by nonhemorrhagic infarction. Case report, 690
Statin
Improvement in neurological outcome after administration of atorvastatin following experimental intracerebral hemorrhage in rats, 104
Stem cell
Peripheral nerve regeneration by transplantation of bone marrow stromal cell–derived Schwann cells in adult rats, 806
Stent
Cost of treating high-risk symptomatic carotid artery stenosis: stent insertion and angioplasty compared with endarterectomy, 904
Emergency stent placement for symptomatic acute carotid artery occlusion after endarterectomy. Case report, 151
Stereotactic biopsy
Combined use of ^{18}F-fluorodeoxyglucose and ^{11}C-methionine in 45 positron emission tomography–guided stereotactic brain biopsies, 476
Diagnosis of Erdheim–Chester disease by using computerized tomography–guided stereotactic biopsy of a caudate lesion. Case report, 521
Stereotactic radiosurgery
Analysis of nidus obliteration rates after gamma knife surgery for arteriovenous malformations based on long-term follow-up data: the University of Tokyo experience, 18
Leksell Gamma Knife coordinate setting slippage: how often, how much? 590
Steroids
Primary hypophysitis: a single-center experience in 16 cases, 262
Stroke
Effects of arterial geometry on aneurysm growth: three-dimensional computational fluid dynamics study, 676
Emergency stent placement for symptomatic acute carotid artery occlusion after endarterectomy. Case report, 151
Functional impairment, disability, and quality of life outcome after decompressive hemicraniectomy in malignant middle cerebral artery infarction, 248
Improvement in neurological outcome after administration of atorvastatin following experimental intracerebral hemorrhage in rats, 104
Transient focal cerebral ischemia–induced neurogenesis in the dentate gyrus of the adult mouse, 799
Subarachnoid hemorrhage
Acute alterations in microvascular basal lamina after subarachnoid hemorrhage, 633
Association between cerebrospinal fluid levels of asymmetric dimethyl-L-arginine, an endogenous inhibitor of endothelial nitric oxide synthase, and cerebral vasospasm in a primate model of subarachnoid hemorrhage, 836
Bilirubin as a cerebrospinal fluid marker of sentinel subarachnoid hemorrhage: a preliminary report, 1026
Blood transfusion and increased risk for vasospasm and poor outcome after subarachnoid hemorrhage, 1
Clot volume and clearance rate as independent predictors of vasospasm after aneurysmal subarachnoid hemorrhage, 255
Detection of soluble intercellular adhesion molecule–1 and vascular cell adhesion molecule–1 in both cerebrospinal fluid and serum of patients after aneurysmal subarachnoid hemorrhage, 1030
Early surgery-related complications after aneurysm clip placement: an analysis of causes and patient outcomes, 600
The effect of nimodipine on cerebral oxygenation in patients with poor-grade subarachnoid hemorrhage, 594
Fisher's classification. Letters, 356, 357
Hemorrhage from moyamoya-like vessels associated with a cerebral arteriovenous malformation. Case report, 869
Human serum albumin. Letters, 564, 566
Influence of aspirin on outcome following aneurysmal subarachnoid hemorrhage, 921
Inhibition of cerebral vasospasm by intracranial delivery of ibuprofen from a controlled-release polymer in a rabbit model of subarachnoid hemorrhage, 93
Intracranial vertebral artery dissection with subarachnoid hemorrhage: clinical characteristics and outcomes in conservatively treated patients, 25
Pharmacokinetics of controlled-release polymers in the subarachnoid space after subarachnoid hemorrhage in rabbits, 99
Prevention of vasospasm by anti-CD11/CD18 monoclonal antibody therapy following subarachnoid hemorrhage in rabbits, 88
Prospective risk of hemorrhage in patients with vertebrobasilar nonsaccular intracranial aneurysm, 82
Relationship between intracranial pressure and other clinical variables in patients with aneurysmal subarachnoid hemorrhage, 408
Role of apoptosis in intracranial aneurysm rupture, 1018
Seizures and subarachnoid hemorrhage. Letters, 717, 718
Shunt-dependent hydrocephalus after rupture of intracranial aneurysms: a prospective study of the influence of treatment modality, 402
Subthalamic nucleus
Implantation of bilateral deep brain stimulator in two patients with Parkinson disease and preexisting cardiac pacemakers. Report of two cases, 1073
Neurotransmitter release from high-frequency stimulation of the subthalamic nucleus, 511
Stimulation of the subthalamic nucleus compared with the globus pallidus internus in patients with Parkinson disease, 195
Unilateral stimulation of the subthalamic nucleus in Parkinson disease: a double-blind 12-month evaluation study, 36
Subthalamic region stimulation
Stimulation of the subthalamic region for essential tremor, 48
Superior sagittal sinus
Endoscopic anatomy of the chordae willisii in the superior sagittal sinus, 832

Superoxide dismutase
Life span extension and reduced neuronal death after weekly intraventricular cyclosporin injections in the G93A transgenic mouse model of amytrophic lateral sclerosis, 128
Suprapineal recess
Suprapineal recess: an alternate site for third ventriculostomy? Case report, 518
Suprascapular nerve
Evaluation of suprascapular nerve neurotization after nerve graft or transfer in the treatment of brachial plexus traction lesions, 377
Supratentorial glioblastoma multiforme
The influence of sex and the presence of giant cells on postoperative long-term survival in adult patients with supratentorial glioblastoma multiforme, 219
Surgical approach
Comparison of the transvermian and telovelar approaches to the fourth ventricle, 484
Surgical complication
Early surgery-related complications after aneurysm clip placement: an analysis of causes and patient outcomes, 600
Surgical planning
Integration of biochemical images of a tumor into frameless stereotaxy achieved using a magnetic resonance imaging/magnetic resonance spectroscopy hybrid data set, 287
Surgical repair
Surgical repair of brachial plexus injury. Editorial, 361, 363
Surgical repair of brachial plexus injury: a multinational survey of experienced peripheral nerve surgeons, 365
Surgical technique
Anatomical landmarks for hemispherotomy and their clinical application, 747
Surgical treatment
Surgical management of meningiomas involving the optic nerve sheath, 951

Temporal lobe
Functional separation of languages in the bilingual brain: a comparison of electrical stimulation language mapping in 25 bilingual patients and 117 monolingual control patients, 449
Temporal lobe surgery
Impact of temporal lobe surgery. Editorial, 725, 738
Temporal lobectomy
White matter fiber dissection of the optic radiations of the temporal lobe and implications for surgical approaches to the temporal horn, 739
Tension movement
A quiet hand for microneurosurgery: twiddle your thumb. Technical note, 541
Thalamic stimulation
Deep brain stimulation for the treatment of parkinsonian, essential, and poststroke tremor: a suitable stimulation method and changes in effective stimulation intensity, 201
Thalamus
Tremor cells in the human thalamus: differences among neurological disorders, 43
Third ventriculostomy
Suprapineal recess: an alternate site for third ventriculostomy? Case report, 518
Thrombectomy
A transcranial approach for direct mechanical thrombectomy of dural sinus thrombosis. Report of two cases, 347
Tissue phantom
A realistic brain tissue phantom for intraparenchymal infusion studies, 314
Tizanidine
Alpha$_2$-adrenergic receptor subtype specificity of intrathecally administered tizanidine used for analgesia for neuropathic pain, 641

Toxicity
Distribution kinetics of targeted cytotoxin in glioma by bolus or convection-enhanced delivery in a murine model, 1004
Transcranial electrical stimulation
Motor evoked potentials. Letters, 563, 564
Transplantation
The Brain Research Laboratory at the Cleveland Metropolitan General Hospital and Case Western Reserve University. Historical vignette, 881
Transradial approach
Transradial approach for neuroendovascular surgery of intracranial vascular lesions, 767
Transsphenoidal surgery
Primary hypophysitis: a single-center experience in 16 cases, 262
Surgery for Rathke cleft cysts: technical considerations and outcomes, 577
Trauma
Spontaneous regression of an aneurysm at a nonbranching site of the supraclinoid internal carotid artery. Case report, 1070
Traumatic brain injury
Atorvastatin reduction of intracranial hematoma volume in rats subjected to controlled cortical impact, 822
Atorvastatin reduction of intravascular thrombosis, increase in cerebral microvascular patency and integrity, and enhancement of spatial learning in rats subjected to traumatic brain injury, 813
Influence of apoptosis on neurological outcome following traumatic cerebral contusion, 233
Treatment evaluation
Intracranial vertebral artery dissection with subarachnoid hemorrhage: clinical characteristics and outcomes in conservatively treated patients, 25
Treatment planning
Proton magnetic resonance spectroscopy imaging in the evaluation of patients undergoing gamma knife surgery for Grade IV glioma, 467
Tremor
Deep brain stimulation for the treatment of parkinsonian, essential, and poststroke tremor: a suitable stimulation method and changes in effective stimulation intensity, 201
A quiet hand for microneurosurgery: twiddle your thumb. Technical note, 541
Tremor cells in the human thalamus: differences among neurological disorders, 43
Trigeminal ganglion
Pathophysiology of trigeminal neuralgia: new evidence from a trigeminal ganglion intraoperative microneurographic recording. Case report, 872
Trigeminal nerve
Detailed anatomy of the motor and sensory roots of the trigeminal nerve and their neurovascular relationships: a magnetic resonance imaging study, 427
Trigeminal neuralgia
Pathophysiology of trigeminal neuralgia: new evidence from a trigeminal ganglion intraoperative microneurographic recording. Case report, 872
Tropheryma whippelii
Whipple disease confined to the central nervous system presenting as a solitary frontal tumor. Case report, 336
Tumor invasion
Invasive phenotype observed in 1,3-bis(2-chloroethyl)-1-nitrosourea–resistant sublines of 9L rat glioma cells: a tumor model mimicking a recurrent malignant glioma, 826
Tumor model
Invasive phenotype observed in 1,3-bis(2-chloroethyl)-1-nitrosourea–resistant sublines of 9L rat glioma cells: a tumor model mimicking a recurrent malignant glioma, 826

Tumor vasculature
Intraoperative infrared imaging of brain tumors, 960
Tyrosine hydroxylase
Immunohistochemical determination of the sympathetic pathway in the orbit via the cranial nerves in humans, 1037

Ultrasonography
Perfusion imaging of high-grade gliomas: a comparison between contrast harmonic and magnetic resonance imaging. Technical note, 700
Unilateral stimulation
Unilateral stimulation of the subthalamic nucleus in Parkinson disease: a double-blind 12-month evaluation study, 36
Unruptured aneurysm
Monitoring of the lateral spread response in the endovascular treatment of a hemifacial spasm caused by an unruptured vertebral artery aneurysm. Case report, 861
Unruptured intracranial aneurysm
Incidence and risk factors for growth of unruptured cerebral aneurysms: observation using serial computerized tomography angiography, 908

Vagus nerve
Endotracheal tube electrodes to map and monitor activities of the vagus nerve intraoperatively. Technical note, 536
Vascular cell adhesion molecule–1
Detection of soluble intercellular adhesion molecule–1 and vascular cell adhesion molecule–1 in both cerebrospinal fluid and serum of patients after aneurysmal subarachnoid hemorrhage, 1030
Vascular injury
Atorvastatin reduction of intravascular thrombosis, increase in cerebral microvascular patency and integrity, and enhancement of spatial learning in rats subjected to traumatic brain injury, 813
Vascular malformation
Cavernous hemangioma extending to the extracranial, intracranial, and orbital regions. Case report, 1057
Harvey W. Cushing and cerebrovascular surgery: Part II, vascular malformations. Historical vignette, 553
Vascular tumor
Capillary hemangioma of the central nervous system, 73
Vasospasm
Association between cerebrospinal fluid levels of asymmetric dimethyl-L-arginine, an endogenous inhibitor of endothelial nitric oxide synthase, and cerebral vasospasm in a primate model of subarachnoid hemorrhage, 836
Blood transfusion and increased risk for vasospasm and poor outcome after subarachnoid hemorrhage, 1
Clot volume and clearance rate as independent predictors of vasospasm after aneurysmal subarachnoid hemorrhage, 255
Influence of aspirin on outcome following aneurysmal subarachnoid hemorrhage, 921
Intentional partial coil occlusion followed by delayed clip application of wide-necked middle cerebral artery aneurysms in patients presenting with severe vasospasm. Report of two cases, 154
Pharmacokinetics of controlled-release polymers in the subarachnoid space after subarachnoid hemorrhage in rabbits, 99
Prevention of vasospasm by anti-CD11/CD18 monoclonal antibody therapy following subarachnoid hemorrhage in rabbits, 88
Venography
Resolution of pseudotumor cerebri after bariatric surgery for related obesity. Case report, 878
Venous angioma
Cerebral venous angioma of the pons complicated by nonhemorrhagic infarction. Case report, 690
Venous infarction
Cerebral venous angioma of the pons complicated by nonhemorrhagic infarction. Case report, 690
Venous sinus obstruction
A transcranial approach for direct mechanical thrombectomy of dural sinus thrombosis. Report of two cases, 347
Ventral caudate nucleus
Deep brain stimulation of the ventral caudate nucleus in the treatment of obsessive–compulsive disorder and major depression. Case report, 682
Ventriculoperitoneal shunt
Continuous-flow shunt for treatment of hydrocephalus due to lesions of the posterior fossa, 762
Treatment of hydrocephalus. Letters, 719, 720
Vertebral artery
Intracranial vertebral artery dissection with subarachnoid hemorrhage: clinical characteristics and outcomes in conservatively treated patients, 25
Monitoring of the lateral spread response in the endovascular treatment of a hemifacial spasm caused by an unruptured vertebral artery aneurysm. Case report, 861
Ruptured vertebral artery dissection. Letters, 169, 170
Vimentin
Aurora-B dysfunction of multinucleated giant cells in glioma detected by site-specific phosphorylated antibodies, 1012
Visual cortex
Retinotopy with coordinates of lateral occipital cortex in humans, 114
Visual deficit
White matter fiber dissection of the optic radiations of the temporal lobe and implications for surgical approaches to the temporal horn, 739
Visual field defect
Complex visual hallucinations (Charles Bonnet syndrome) in visual field defects following cerebral surgery. Report of four cases, 846
Visual hallucination
Complex visual hallucinations (Charles Bonnet syndrome) in visual field defects following cerebral surgery. Report of four cases, 846
Visual outcome
Surgical management of meningiomas involving the optic nerve sheath, 951
Volumetric devascularization
Volumetric thermal devascularization of large meningiomas, 779
Volumetric measurement
Clot volume and clearance rate as independent predictors of vasospasm after aneurysmal subarachnoid hemorrhage, 255

Wada test
Intracarotid Amytal memory test and hippocampal magnetic resonance imaging volumetry: validity of the Wada test as an indicator of hippocampal integrity among candidates for epilepsy surgery, 926
Walking track analysis
Peripheral nerve regeneration by transplantation of bone marrow stromal cell–derived Schwann cells in adult rats, 806
Waterjet dissector
Pulsed holmium:yltrium-aluminum-garnet laser–induced liquid jet as a novel dissection device in neuroendoscopic surgery, 145
Whipple disease
Whipple disease confined to the central nervous system presenting as a solitary frontal tumor. Case report, 336
William Osler
William Osler at McGill University: the Baby Professor and his early contributions to neurosurgery. Historical vignette, 705

Writing-specific site
Writing-specific sites in frontal areas: a cortical stimulation study, 787

X chromosome–linked inhibitor of apoptosis protein
Enhancement of C2-ceramide antitumor activity by small interfering RNA on X chromosome–linked inhibitor of apoptosis protein in resistant human glioma cells, 119

Xanthogranuloma
Preoperative stent placement for intradural vertebral artery stenosis from a rare xanthogranuloma. Case report, 864

Yytrium-aluminum-garnet laser
Pulsed holmium:yytrium-aluminum-garnet laser–induced liquid jet as a novel dissection device in neuroendoscopic surgery, 145

Journal of Neurosurgery: Spine

July 2004, Volume 1, Number 1

Clinical Articles:

Selection of instrumentation and fusion levels for scoliosis: where to start and where to stop. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004. Keith H. Bridwell 1

Evaluation and treatment of adult spinal deformity. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004. Robert F. Heary 9

Contribution of recombinant human morphogenetic protein–2 to the rapid creation of interbody fusion when used in transforaminal lumbar interbody fusion: a preliminary report. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004. Praveen V. Mummaneni, Jeff Pan, Regis W. Haid, and Gerald E. Rodts .. 19

Lumbar interbody fusion: state-of-the-art technical advances. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004. Praveen V. Mummaneni, Regis W. Haid, and Gerald E. Rodts 24

Lumbar stenosis: a personal record. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004. John A. Jane Sr., Jonathan H. Sherman, Paul T. Boulos, Craig Luce, and Aaron S. Dumont 31

Cervical magnetic resonance imaging abnormalities not predictive of cervical spine instability in traumatically injured patients. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004. Eric M. Horn, Gregory P. Lekovic, Iman Feiz-Erfan, Volker K. H. Sonntag, and Nicholas Theodore 39

The impact of minimally invasive cervical spine surgery. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004. Tim E. Adamson 43

Fusion rate: a time-to-event phenomenon. Sagun K. Tuli, Jayshree Tuli, Peng Chen, and Eric J. Woodard 47

Synovial cysts of the thoracic spine. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004. Aaron A. Cohen-Gadol, J. Bradley White, James J. Lynch, Gary M. Miller, and William E. Krauss . 52

Thoracic microendoscopic discectomy. Mick J. Perez-Cruet, Bong-Soo Kim, Faheem Sandhu, Dino Samartzis, and Richard G. Fessler 58

Surgical treatment of lumbosacral plexus injuries. Eva Marie Lang, Jörg Borges, and Thomas Carlstedt 64

Metabolic neuroimaging of the cervical spinal cord in patients with compressive myelopathy: a high-resolution positron emission tomography study. Kenzo Uchida, Shigeru Kobayashi, Takafumi Yayama, Yasuo Kokubo, Hideaki Nakajima, Michiko Kakuyama, Norihiro Sadato, Tatsuro Tsuchida, Yoshiharu Yonekura, and Hisatoshi Baba 72

Suspended laminoplasty for wide posterior cervical decompression and intradural access: results, advantages, and complications. Steven Casha, H. Andries Engelbrecht, Stephan J. DuPlessis, and R. John Hurlbert 80

Laboratory Investigations:

Vulnerability of the subcostal nerve to injury from bone graft harvesting from the iliac crest. Dean Chou, Phillip B. Storm, and James N. Campbell 87

The use of bone morphogenetic protein–6 gene therapy for percutaneous spinal fusion in rabbits. Jeffrey J. Laurent, K. Michael Webb, Elisa J. Beres, Kevin McGee, Jinzhong Li, Bert van Rietbergen, and Gregory A. Helm 90

Single-unit artificial intervertebral disc. Russell Alberts, Arun-Angelo Patil, and Dongxue Zhou 95

A biomechanical comparison of supplementary posterior translaminar facet and transfacetopedicular screw fixation after anterior lumbar interbody fusion. Sung-Min Kim, T. Jesse Lim, Josemaria Paterno, and Daniel H. Kim 101

A biomechanical comparison of three surgical approaches in bilateral subaxial cervical facet dislocation. Sung-Min Kim, T. Jesse Lim, Josemaria Paterno, Jon Park, and Daniel H. Kim 108

Biomechanical testing of anterior and posterior thoracolumbar instrumentation in the cadaveric spine. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004. Kurt M. Eichholz, Patrick W. Hitchon, Aaron From, Paige Rubenbauer, Satoshi Nakamura, Tae Hong Lim, and James Torner 116

Mechanical properties and function of the spinal pia mater. Hiroshi Ozawa, Takeo Matsumoto, Toshiro Ohashi, Masaaki Sato, and Shoichi Kokubun 122

Cervical spinal cord delivery of a rabies G protein pseudotyped lentiviral vector in the SOD-1 transgenic mouse. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004. Diana Tanase, Qingshan Teng, Ajit A. Krishnaney, James K. Liu, Mary E. Garrity-Moses, and Nicholas M. Boulis 128

Case Report:

Anterior atlas fracture following suboccipital decompression for Chiari I malformation. Report of two cases. Brian A. O'Shaughnessy, Sean A. Salehi, Saad Ali, and John C. Liu 137

Case Illustrations:

Charcot spine: a complication of medullary arteriovenous malformation. Case illustration. Raphaël Vialle, Fabrice Parker, Jean-François Lepeintre, Georges Rodesch, Jean-Louis Tassin, and Marie Tadié 141

Thoracic spinal nerve hemangioblastoma. Case illustration. Gabriel C. Tender, John A. Butman, Edward H. Oldfield, and Russell R. Lonser 142

Journal of Neurosurgery: Spine

September 2004, Volume 1, Number 2

CLINICAL ARTICLES:

Neurological complications of lumbar artificial disc replacement and comparison of clinical results with those related to the lumbar arthrodesis in the literature: results of a multicenter, prospective, randomized investigational device exemption study of Charite intervertebral disc. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004. FRED H. GEISLER, SCOTT L. BLUMENTHAL, RICHARD D. GUYER, PAUL C. MCAFEE, JOHN J. REGAN, J. PATRICK JOHNSON, BRADFORD MULLIN 143

The future in the care of the cervical spine: interbody fusion and arthroplasty. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004. PRAVEEN V. MUMMANENI AND REGIS W. HAID 155

Three-level and four-level anterior cervical discectomies and titanium cage–augmented fusion with and without plate fixation. SHIUH-LIN HWANG, CHIH-LUNG LIN, ANN-SHUNG LIEU, KUNG-SHING LEE, TAI-HUNG KUO, YAN-FEN HWANG, YU-FENG SU, AND SHEN-LONG HOWNG 160

Long-term results of expansive open-door laminoplasty for ossification of the posterior longitudinal ligament of the cervical spine. YUTO OGAWA, YOSHIAKI TOYAMA, KAZUHIRO CHIBA, MORIO MATSUMOTO, MASAYA NAKAMURA, HIRONARI TAKAISHI, HISASHI HIRABAYASHI, AND KIYOSHI HIRABAYASHI 168

Does chronic cervical myelopathy affect respiratory function? HIROMITSU TOYODA, HIROAKI NAKAMURA, SADAHIKO KONISHI, HIDETOMI TERAI, AND KUNIO TAKAOKA 175

Cervical radiculopathy, entrapment neuropathy and thoracic outlet syndrome: how to differentiate? Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004. JOHN E. MCGILLICUDDY 179

Evaluation and treatment of congenital and developmental anomalies of the cervical spine. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004. ARNOLD H. MENEZES 188

LABORATORY INVESTIGATIONS:

Insertion torque and pullout force of rescue screws for anterior cervical plate fixation in a fatigued initial pilot hole. TOBIAS PITZEN, FREDERICK FRANTA, DRAGOS BARBIER, AND WOLF-INGO STEUDEL 198

A comparison of simulator-tested and -retrieved cervical disc prostheses. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004. PAUL A. ANDERSON, JEFFREY P. ROULEAU, JEFFREY M. TOTH, AND K. DANIEL RIEW 202

CASE REPORTS:

Vertebral synovial chondromatosis. Report of two cases and review of the literature. GARY L. GALLIA, NIRIT WEISS, JAMES N. CAMPBELL, EDWARD F. MCCARTHY, ANTHONY P. TUFARO, AND ZIYA L. GOKASLAN 211

Positional vomiting due to a thoracic spinal dural arteriovenous fistula. Case report. DENNIS J. CORDATO, MARK A. DAVIES, LYNETTE T. MASTERS, PHILLIP D. CREMER, RAYMOND S. SCHWARTZ, WILLIAM SORBY, AND ZORAN BECVAROVSKI 219

Transdural herniation of the thoracic spinal cord: untethering via a posterolateral transpedicular approach. RYDER GWINN AND FRASER HENDERSON 223

Percutaneous vertebroplasty for the treatment of burst fractures. Case report. JYI-FENG CHEN, CHIEH-TSAI WU, AND SHIH-TSENG LEE 228

Spontaneous spinal hematomas and low-molecular-weight heparin. Report of four cases and review of the literature. PETER A. HEPPNER, STEPHEN J. MONTEITH, AND ANDREW J. J. LAW 232

CASE ILLUSTRATION:

Multiple vertebral fractures in osteogenesis imperfecta treated by vertebroplasty. Case illustration. GÁBOR KASÓ, CECÍLIA VARJÚ, AND TAMÁS DÓCZI 237

HISTORICAL VIGNETTE:

Paleopathological examination of medieval spines with exceptional thoracic kyphosis most likely secondary to spinal tuberculosis. JOCHEN WEBER, ALFRED CZARNETZKI, AND CARSTEN M. PUSCH 238

Journal of Neurosurgery: Spine

October 2004, Volume 1, Number 3

CLINICAL ARTICLES:

Multimodality intraoperative monitoring during complex lumbosacral procedures: indications, techniques, and long-term follow-up review of 61 consecutive cases. ANDREI V. KRASSIOUKOV, ROGER SARJEANT, HOMAN ARKIA, AND MICHAEL G. FEHLINGS 243

Bone morphogenetic proteins in anterior lumbar interbody fusion: old techniques and new technologies. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004. J. KENNETH BURKUS 254

Clinical outcomes and complications associated with pedicle screw fixation–augmented lumbar interbody fusion. DENNIS J. RIVET, DAVID JECK, JAMES BRENNAN, ADRIAN EPSTEIN, AND CARL LAURYSSEN 261

Prospective outcomes evaluation after decompression with or without instrumented fusion for lumbar stenosis and degenerative Grade I spondylolisthesis. ZOHER GHOGAWALA, EDWARD C. BENZEL, SEPIDEH AMIN-HANJANI, FRED G. BARKER II, J. FRED HARRINGTON, SUBU N. MAGGE, JOHN STRUGAR, JEAN-VALÉRY C. E. COUMANS, AND LAWRENCE F. BORGES 267

Vertical atlantoaxial distraction injuries: radiological criteria and clinical implications. L. FERNANDO GONZALEZ, DAVID FIORELLA, NEIL R. CRAWFORD, ROBERT C. WALLACE, IMAN FEIZ-ERFAN, DENISE DRUMM, STEPHEN M. PAPADOPOULOS, AND VOLKER K. H. SONNTAG 273

Treatment of basilar invagination by atlantoaxial joint distraction and direct lateral mass fixation. ATUL GOEL 281

Single-stage posterolateral transpedicular approach for resection of epidural metastatic spine tumors involving the vertebral body with circumferential reconstruction: results in 140 patients. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004. JEREMY C. WANG, PATRICK BOLAND, NANDITA MITRA, YOSHIYA YAMADA, ERIC LIS, MICHAEL STUBBLEFIELD, MARK H. BILSKY 287

LABORATORY INVESTIGATIONS:

The V_2 segment of the vertebral artery and its branches. SERDAR OZGEN, T. GLENN PAIT, AND Y. SÜKRÜ ÇAGLAR 299

An anatomical study of the C-2 pedicle. SAIT NADERI, CANDAN ARMAN, MUSTAFA GÜVENÇER, ESIN KORMAN, MEHMET SENOGLU, SÜLEYMAN TETIK, AND NURI ARDA 306

Inhibition of the nuclear factor-κB activation with pyrrolidine dithiocarbamate attenuating inflammation and oxidative stress after experimental spinal cord trauma in rats. GIOVANNI LA ROSA, SALVATORE CARDALI, TIZIANA GENOVESE, ALFREDO CONTI, ROSANNA DI PAOLA, DOMENICO LA TORRE, FABIO CACCIOLA, AND SALVATORE CUZZOCREA 311

Mechanically engineered hydrogel scaffolds for axonal growth and angiogenesis after transplantation in spinal cord injury. AJAY BAKSHI, OMAR FISHER, TANER DAGCI, B. TIMOTHY HIMES, ITZHAK FISCHER, AND ANTHONY LOWMAN 322

Minimally invasive delivery of stem cells for spinal cord injury: advantages of the lumbar puncture technique. AJAY BAKSHI, COREY HUNTER, SHARON SWANGER, ANGELO LEPORE, AND ITZHAK FISCHER 330

CASE REPORTS:

Anomalous vertebral artery at the craniovertebral junction in a patient with Down syndrome. Case report. MASASHI YAMAZAKI, MASAO KODA, MINORI YONEDA, ATSUOMI AIBA, AND HIDESHIGE MORIYA 338

Trevor disease of the spine. Case report. RUDOLPH J. SCHROT, KEE D. KIM, AND MARK FEDOR 342

NEUROSURGICAL FORUM: Letter to the Editor 347

Index to
Journal of Neurosurgery: Spine
Volume 101

July, September, and October 2004

Author Index

ADAMSON TE. The impact of minimally invasive cervical spine surgery. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 43
AIBA A. *See* Yamazaki M, 338
ALBERTS R, PATIL AA, ZHOU D. Single-unit artificial intervertebral disc, 95
ALI S. *See* O'Shaughnessy BA, 137
AMIN-HANJANI S. *See* Ghogawala Z, 267
ANDERSON PA, ROULEAU JP, TOTH JM, RIEW KD. A comparison of simulator-tested and -retrieved cervical disc prostheses. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 202
ARDA N. *See* Naderi S, 306
ARKIA H. *See* Krassioukov AV, 243
ARMAN C. *See* Naderi S, 306

BABA H. *See* Uchida K, 72
BAKSHI A, FISHER O, DAGCI T, HIMES BT, FISCHER I, LOWMAN A. Mechanically engineered hydrogel scaffolds for axonal growth and angiogenesis after transplantation in spinal cord injury, 322
———, HUNTER C, SWANGER S, LEPORE A, FISCHER I. Minimally invasive delivery of stem cells for spinal cord injury: advantages of the lumbar puncture technique, 330
BARBIER D. *See* Pitzen T, 198
BARKER FG II. *See* Ghogawala Z, 267
BECVAROVSKI Z. *See* Cordato DJ, 219
BENZEL EC. *See* Ghogawala Z, 267
BERES EJ. *See* Laurent JJ, 90
BILSKY MH. *See* Wang JC, 287
BLUMENTHAL SL. *See* Geisler FH, 143
BOLAND P. *See* Wang JC, 287
BORGES J. *See* Lang EM, 64
BORGES LF. *See* Ghogawala Z, 267
BOULIS NM. *See* Tanase K, 128
BOULOS PT. *See* Jane JA Sr, 31
BRENNAN J. *See* Rivet DJ, 261
BRIDWELL KH. Selection of instrumentation and fusion levels for scoliosis: where to start and where to stop. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 1
BURKUS JK. Bone morphogenetic proteins in anterior lumbar interbody fusion: old techniques and new technologies. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 254
BUTMAN JA. *See* Tender GC, 142

CACCIOLA F. *See* La Rosa G, 311
ÇAĞLAR YS. *See* Özgen S, 299
CAMPBELL JN. *See* Chou D, 87
———. *See* Gallia GL, 211
CARDALI S. *See* La Rosa G, 311
CARLSTEDT T. *See* Lang EM, 64
CASHA S, ENGELBRECHT HA, DUPLESSIS SJ, HURLBERT RJ. Suspended laminoplasty for wide posterior cervical decompression and intradural access: results, advantages, and complications, 80
CHEN JF, WU CT, LEE ST. Percutaneous vertebroplasty for the treatment of burst fractures. Case report, 228
CHEN P. *See* Tuli SK, 47
CHIBA K. *See* Ogawa Y, 168
CHOU D, STORM PB, CAMPBELL JN. Vulnerability of the subcostal nerve to injury during bone graft harvesting from the iliac crest, 87
COHEN-GADOL AA, WHITE JB, LYNCH JJ, MILLER GM, KRAUSS WE. Synovial cysts of the thoracic spine, 52
CONTI A. *See* La Rosa G, 311
CORDATO DJ, DAVIES MA, MASTERS LT, CREMER PD, SCHWARTZ RS, SORBY W, BECVAROVSKI Z. Positional vomiting due to a thoracic spinal dural arteriovenous fistula. Case report, 219
COUMANS JVCE. *See* Ghogawala Z, 267
CRAWFORD NR. *See* Gonzalez LF, 273
CREMER PD. *See* Cordato DJ, 219
CUZZOCREA S. *See* La Rosa G, 311
CZARNETZKI A. *See* Weber J, 238

DAGCI T. *See* Bakshi A, 322
DAVIES MA. *See* Cordato DJ, 219
DI PAOLA R. *See* La Rosa G, 311
DÓCZI T. *See* Kasó G, 237
DRUMM D. *See* Gonzalez LF, 273
DUMONT AS. *See* Jane JA Sr, 31
DUPLESSIS SJ. *See* Casha S, 80

EICHHOLZ KM, HITCHON PW, FROM A, RUBENBAUER P, NAKAMURA S, LIM TH, TORNER J. Biomechanical testing of anterior and posterior thoracolumbar instrumentation in the cadaveric spine. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 116
ENGELBRECHT HA. *See* Casha S, 80
EPSTEIN A. *See* Rivet DJ, 261

FEDOR M. *See* Schrot RJ, 342
FEHLINGS MG. *See* Krassioukov AV, 243
FEIZ-ERFAN I. *See* Gonzalez LF, 273
———. *See* Horn EM, 39
FESSLER RG. *See* Perez-Cruet MJ, 58
FIORELLA D. *See* Gonzalez LF, 273
FISCHER I. *See* Bakshi A, 322, 330
FISHER O. *See* Bakshi A, 322
FRANTA F. *See* Pitzen T, 198
FROM A. *See* Eichholz KM, 116

GALLIA GL, WEISS N, CAMPBELL JN, MCCARTHY EF, TUFARO AP, GOKASLAN ZL. Vertebral synovial chondromatosis. Report of two cases and review of the literature, 211
GARRITY-MOSES ME. *See* Tanase K, 128
GEISLER FH, BLUMENTHAL SL, GUYER RD, MCAFEE PC, REGAN JJ, JOHNSON JP, MULLIN B. Neurological complications of lumbar artificial disc replacement and comparison of clinical results with those related to lumbar arthrodesis in the literature: results of a multicenter, prospective, randomized investigational device exemption study of Charité intervertebral disc. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 143
GENOVESE T. *See* La Rosa G, 311
GHOGAWALA Z, BENZEL EC, AMIN-HANJANI S, BARKER FG II, HARRINGTON JF, MAGGE SN, STRUGAR J, COUMANS JVCE, BORGES LF. Prospective outcomes evaluation after decompression with or without instrumented fusion for lumbar stenosis and degenerative Grade I spondylolisthesis, 267
GOEL A. Atlantoaxial instability. Letters, 347
———. Treatment of basilar invagination by atlantoaxial joint distraction and direct lateral mass fixation, 281
GOKASLAN ZL. *See* Gallia GL, 211
GONZALEZ LF, FIORELLA D, CRAWFORD NR, WALLACE RC, FEIZ-ERFAN I, DRUMM D, PAPADOPOULOS SM, SONNTAG VKH. Vertical atlantoaxial distraction injuries: radiological criteria and clinical implications, 273
GÜVENÇER M. *See* Naderi S, 306
GUYER RD. *See* Geisler FH, 143
GWINN R, HENDERSON F. Transdural herniation of the thoracic spinal cord: untethering via a posterolateral transpedicular approach. Report of three cases, 223

HAID RW. *See* Mummaneni PV, 19, 24, 155
HARRINGTON JF. *See* Ghogawala Z, 267
HEARY RF. Evaluation and treatment of adult spinal deformity. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 9
HELM GA. *See* Laurent JJ, 90
HENDERSON F. *See* Gwinn R, 223
HEPPNER PA, MONTEITH SJ, LAW AJJ. Spontaneous spinal hematomas and low-molecular-weight heparin. Report of four cases and review of the literature, 232
HIMES BT. *See* Bakshi A, 322
HIRABAYASHI H. *See* Ogawa Y, 168
HIRABAYASHI K. *See* Ogawa Y, 168
HITCHON PW. *See* Eichholz KM, 116
HORN EM, LEKOVIC GP, FEIZ-ERFAN I, SONNTAG VKH, THEODORE N. Cervical magnetic resonance imaging abnormalities not predictive of cervical spine instability in traumatically injured patients. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 39
HOWNG SL. *See* Hwang SL, 160
HUNTER C. *See* Bakshi A, 330
HURLBERT RJ. *See* Casha S, 80
HWANG SL, LIN CL, LIEU AS, LEE KS, KUO TH, HWANG YF, SU YF, HOWNG SL. Three-level and four-level anterior cervical discectomies and titanium cage–augmented fusion with and without plate fixation, 160
HWANG YF. *See* Hwang SL, 160

JANE JA SR, SHERMAN JH, BOULOS PT, LUCE C, DUMONT AS. Lumbar stenosis: a personal record. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 31
JECK D. *See* Rivet DJ, 261
JOHNSON JP. *See* Geisler FH, 143

KAKUYAMA M. *See* Uchida K, 72
KASÓ G, VARJÚ C, DÓCZI T. Multiple vertebral fractures in osteogenesis imperfecta treated by vertebroplasty. Case illustration, 237
KIM BS. *See* Perez-Cruet MJ, 58
KIM D. *See* Le H, 347
KIM DH. *See* Kim SM, 101, 108
KIM KD. *See* Schrot RJ, 342
KIM SM, LIM TJ, PATERNO J, KIM DH. A biomechanical comparison of supplementary posterior translaminar facet and transfacetopedicular screw fixation after anterior lumbar interbody fusion, 101
———, ———, ———, PARK J, KIM DH. A biomechanical comparison of three surgical approaches in bilateral subaxial cervical facet dislocation, 108
KOBAYASHI S. *See* Uchida K, 72
KODA M. *See* Yamazaki M, 338
KOKUBO Y. *See* Uchida K, 72
KOKUBUN S. *See* Ozawa H, 122
KONISHI S. *See* Toyoda H, 175
KORMAN E. *See* Naderi S, 306
KRASSIOUKOV AV, SARJEANT R, ARKIA H, FEHLINGS MG. Multimodality intraoperative monitoring during complex lumbosacral procedures: indications, techniques, and long-term follow-up review of 61 consecutive cases, 243
KRAUSS WE. *See* Cohen-Gadol AA, 52
KRISHNANEY AA. *See* Tanase K, 128
KUO TH. *See* Hwang SL, 160

LA ROSA G, CARDALI S, GENOVESE T, CONTI A, DI PAOLA R, LA TORRE D, CACCIOLA F, CUZZOCREA S. Inhibition of the nuclear factor–κB activation with pyrrolidine dithiocarbamate attenuating inflammation and oxidative stress after experimental spinal cord trauma in rats, 311
LA TORRE D. *See* La Rosa G, 311
LANG EM, BORGES J, CARLSTEDT T. Surgical treatment of lumbosacral plexus injuries, 64
LAURENT JJ, WEBB KM, BERES EJ, MCGEE K, LI J, VAN RIETBERGEN B, HELM GA. The use of bone morphogenetic protein–6 gene therapy for percutaneous spinal fusion in rabbits, 90
LAURYSSEN C. *See* Rivet DJ, 261
LAW AJJ. *See* Heppner PA, 232
LE H, KIM D. Atlantoaxial instability. Letters, 347
LEE KS. *See* Hwang SL, 160
LEE ST. *See* Chen JF, 228

LEKOVIC GP. *See* Horn EM, 39
LEPEINTRE JF. *See* Vialle R, 141
LEPORE A. *See* Bakshi A, 330
LI J. *See* Laurent JJ, 90
LIEU AS. *See* Hwang SL, 160
LIM TH. *See* Eichholz KM, 116
LIM TJ. *See* Kim SM, 101, 108
LIN CL. *See* Hwang SL, 160
LIS E. *See* Wang JC, 287
LIU JC. *See* O'Shaughnessy BA, 137
LIU JK. *See* Tanase K, 128
LONSER R. *See* Tender GC, 142
LOWMAN A. *See* Bakshi A, 322
LUCE C. *See* Jane JA Sr, 31
LYNCH JJ. *See* Cohen-Gadol AA, 52

MAGGE SN. *See* Ghogawala Z, 267
MASTERS LT. *See* Cordato DJ, 219
MATSUMOTO M. *See* Ogawa Y, 168
MATSUMOTO T. *See* Ozawa H, 122
MCAFEE PC. *See* Geisler FH, 143
MCCARTHY EF. *See* Gallia GL, 211
MCGEE K. *See* Laurent JJ, 90
MCGILLICUDDY JE. Cervical radiculopathy, entrapment neuropathy, and thoracic outlet syndrome: how to differentiate? Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 179
MENEZES AH. Evaluation and treatment of congenital and developmental anomalies of the cervical spine. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 188
MILLER GM. *See* Cohen-Gadol AA, 52
MITRA N. *See* Wang JC, 287
MONTEITH SJ. *See* Heppner PA, 232
MORIYA H. *See* Yamazaki M, 338
MULLIN B. *See* Geisler FH, 143
MUMMANENI PV, HAID RW. The future in the care of the cervical spine: interbody fusion and arthroplasty. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 155
———, ———, RODTS GE. Lumbar interbody fusion: state-of-the-art technical advances. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 24
———, PAN J, HAID RW, RODTS GE. Contribution of recombinant human bone morphogenetic protein–2 to the rapid creation of interbody fusion when used in transforaminal lumbar interbody fusion: a preliminary report. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 19

NADERI S, ARMAN C, GÜVENÇER M, KORMAN E, ŞENOĞLU M, TETIK S, ARDA N. An anatomical study of the C-2 pedicle, 306
NAKAJIMA H. *See* Uchida K, 72
NAKAMURA H. *See* Toyoda H, 175
NAKAMURA M. *See* Ogawa Y, 168
NAKAMURA S. *See* Eichholz KM, 116

O'SHAUGHNESSY BA, SALEHI SA, ALI S, LIU JC. Anterior atlas fracture following suboccipital decompression for Chiari I malformation. Report of two cases, 137
OGAWA Y, TOYAMA Y, CHIBA K, MATSUMOTO M, NAKAMURA M, TAKAISHI H, HIRABAYASHI H, HIRABAYASHI K. Long-term results of expansive open-door laminoplasty for ossification of the posterior longitudinal ligament of the cervical spine, 168
OHASHI T. *See* Ozawa H, 122
OLDFIELD EH. *See* Tender GC, 142
OZAWA H, MATSUMOTO T, OHASHI T, SATO M, KOKUBUN S. Mechanical properties and function of the spinal pia mater, 122
ÖZGEN S, PAIT TG, ÇAĞLAR YS. The V_2 segment of the vertebral artery and its branches, 299

PAIT TG. *See* Özgen S, 299
PAN J. *See* Mummaneni PV, 19
PAPADOPOULOS SM. *See* Gonzalez LF, 273
PARK J. *See* Kim SM, 108
PARKER F. *See* Vialle R, 141
PATERNO J. *See* Kim SM, 101, 108
PATIL AA. Alberts R, 95
PEREZ-CRUET MJ, KIM BS, SANDHU F, SAMARTZIS D, FESSLER RG. Thoracic microendoscopic discectomy, 58
PITZEN T, FRANTA F, BARBIER D, STEUDEL WI. Insertion torque and pullout force of rescue screws for anterior cervical plate fixation in a fatigued initial pilot hole, 198
PUSCH CM. *See* Weber J, 238

REGAN JJ. *See* Geisler FH, 143
RIEW KD. *See* Anderson PA, 202
RIVET DJ, JECK D, BRENNAN J, EPSTEIN A, LAURYSSEN C. Clinical outcomes and complications associated with pedicle screw fixation–augmented lumbar interbody fusion, 261
RODESCH G. *See* Vialle R, 141
RODTS GE. *See* Mummaneni PV, 19, 24
ROULEAU JP. *See* Anderson PA, 202
RUBENBAUER P. *See* Eichholz KM, 116

SADATO N. *See* Uchida K, 72
SALEHI SA. *See* O'Shaughnessy BA, 137
SAMARTZIS D. *See* Perez-Cruet MJ, 58
SANDHU F. *See* Perez-Cruet MJ, 58
SARJEANT R. *See* Krassioukov AV, 243
SATO M. *See* Ozawa H, 122
SCHROT RJ, KIM KD, FEDOR M. Trevor disease of the spine. Case report, 342
SCHWARTZ RS. *See* Cordato DJ, 219
ŞENOĞLU M. *See* Naderi S, 306
SHERMAN JH. *See* Jane JA Sr, 31
SONNTAG VKH. *See* Gonzalez LF, 273
———. *See* Horn EM, 39
SORBY W. *See* Cordato DJ, 219
STEUDEL WI. *See* Pitzen T, 198
STORM PB. *See* Chou D, 87
STRUGAR J. *See* Ghogawala Z, 267
STUBBLEFIELD M. See Wang JC, 287
SU YF. *See* Hwang SL, 160
SWANGER S. *See* Bakshi A, 330

TADIÉ M. *See* Vialle R, 141
TAKAISHI H. *See* Ogawa Y, 168
TAKAOKA K. *See* Toyoda H, 175
TANASE K, TENG Q, KRISHNANEY AA, LIU JK, GARRITY-MOSES

ME, Boulis NM. Cervical spinal cord delivery of a rabies G protein pseudotyped lentiviral vector in the SOD-1 transgenic mouse. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 128

Tassin JL. *See* Vialle R, 141

Tender GC, Butman JA, Oldfield EH, Lonser R. Thoracic spinal nerve hemangioblastoma. Case illustration, 142

Teng Q. *See* Tanase K, 128

Terai H. *See* Toyoda H, 175

Tetik S. *See* Naderi S, 306

Theodore N. *See* Horn EM, 39

Torner J. *See* Eichholz KM, 116

Toth JM. *See* Anderson PA, 202

Toyama Y. *See* Ogawa Y, 168

Toyoda H, Nakamura H, Konishi S, Terai H, Takaoka K. Does chronic cervical myelopathy affect respiratory function? 175

Tsuchida T. *See* Uchida K, 72

Tufaro AP. *See* Gallia GL, 211

Tuli J. *See* Tuli SK, 47

Tuli SK, Tuli J, Chen P, Woodard EJ. Fusion rate: a time-to-event phenomenon, 47

Uchida K, Kobayashi S, Yayama T, Kokubo Y, Nakajima H, Kakuyama M, Sadato N, Tsuchida T, Yonekura Y, Baba H. Metabolic neuroimaging of the cervical spinal cord in patients with compressive myelopathy: a high-resolution positron emission tomography study, 72

van Rietbergen B. *See* Laurent JJ, 90

Varjú C. *See* Kasó G, 237

Vialle R, Parker F, Lepeintre JF, Rodesch G, Tassin JL, Tadié M. Charcot spine: a complication of medullary arteriovenous malformation. Case illustration, 141

Wallace RC. *See* Gonzalez LF, 273

Wang JC, Boland P, Mitra N, Yamada Y, Lis E, Stubblefield M, Bilsky MH. Single-stage posterolateral transpedicular approach for resection of epidural metastatic spine tumors involving the vertebral body with circumferential reconstruction: results in 140 patients. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 287

Webb KM. *See* Laurent JJ, 90

Weber J, Czarnetzki A, Pusch CM. Paleopathological examination of medieval spines with exceptional thoracic kyphosis most likely secondary to spinal tuberculosis. Historical vignette, 238

Weiss N. *See* Gallia GL, 211

White JB. *See* Cohen-Gadol AA, 52

Woodard EJ. *See* Tuli SK, 47

Wu CT. *See* Chen JF, 228

Yamada Y. *See* Wang JC, 287

Yamazaki M, Koda M, Yoneda M, Aiba A, Moriya H. Anomalous vertebral artery at the craniovertebral junction in a patient with Down syndrome. Case report, 338

Yayama T. *See* Uchida K, 72

Yoneda M. *See* Yamazaki M, 338

Yonekura Y. *See* Uchida K, 72

Zhou D. *See* Alberts R, 95

Subject Index

Adenovirus
The use of bone morphogenetic protein–6 gene therapy for percutaneous spinal fusion in rabbits, 90
Allograft
Fusion rate: a time-to-event phenomenon, 47
Amyotrophic lateral sclerosis
Cervical spinal cord delivery of a rabies G protein pseudotyped lentiviral vector in the SOD-1 transgenic mouse. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 128
Anal sphincter
Multimodality intraoperative monitoring during complex lumbosacral procedures: indications, techniques, and long-term follow-up review of 61 consecutive cases, 243
Anomaly
Anomalous vertebral artery at the craniovertebral junction in a patient with Down syndrome. Case report, 338
Anterior cervical discectomy and fusion
A biomechanical comparison of three surgical approaches in bilateral subaxial cervical facet dislocation, 108
Anterior cervical plate fixation
A biomechanical comparison of three surgical approaches in bilateral subaxial cervical facet dislocation, 108
Anterior instrumentation
Biomechanical testing of anterior and posterior thoracolumbar instrumentation in the cadaveric spine. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 116
Anterior lumbar interbody fusion
A biomechanical comparison of supplementary posterior translaminar facet and transfacetopedicular screw fixation after anterior lumbar interbody fusion, 101
Bone morphogenetic proteins in anterior lumbar interbody fusion: old techniques and new technologies. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 254
Lumbar interbody fusion: state-of-the-art technical advances. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 24
Arteriovenous malformation
Charcot spine: a complication of medullary arteriovenous malformation. Case illustration, 141
Arthroplasty
The future in the care of the cervical spine: interbody fusion and arthroplasty. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 155
Artificial disc
Single-unit artificial intervertebral disc, 95
Artificial disc replacement
A comparison of simulator-tested and -retrieved cervical disc prostheses. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 202
Neurological complications of lumbar artificial disc replacement and comparison of clinical results with those related to lumbar arthrodesis in the literature: results of a multicenter, prospective, randomized investigational device exemption study of Charité intervertebral disc. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 143
Atlantoaxial dislocation
Treatment of basilar invagination by atlantoaxial joint distraction and direct lateral mass fixation, 281
Atlas
Treatment of basilar invagination by atlantoaxial joint distraction and direct lateral mass fixation, 281
Atlas fracture
Anterior atlas fracture following suboccipital decompression for Chiari I malformation. Report of two cases, 137
Autologous graft
Vulnerability of the subcostal nerve to injury during bone graft harvesting from the iliac crest, 87
Axial
An anatomical study of the C-2 pedicle, 306
Axis
An anatomical study of the C-2 pedicle, 306

Basilar invagination
Treatment of basilar invagination by atlantoaxial joint distraction and direct lateral mass fixation, 281
Bilateral cervical facet dislocation
A biomechanical comparison of three surgical approaches in bilateral subaxial cervical facet dislocation, 108
Biocompatible material
Mechanically engineered hydrogel scaffolds for axonal growth and angiogenesis after transplantation in spinal cord injury, 322
Biomechanical testing
A biomechanical comparison of supplementary posterior translaminar facet and transfacetopedicular screw fixation after anterior lumbar interbody fusion, 101
A biomechanical comparison of three surgical approaches in bilateral subaxial cervical facet dislocation, 108
Biomechanics
Biomechanical testing of anterior and posterior thoracolumbar instrumentation in the cadaveric spine. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 116
Insertion torque and pullout force of rescue screws for anterior cervical plate fixation in a fatigued initial pilot hole, 198
Bone morphogenetic protein
Contribution of recombinant human bone morphogenetic protein–2

to the rapid creation of interbody fusion when used in transforaminal lumbar interbody fusion: a preliminary report. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 19
Lumbar interbody fusion: state-of-the-art technical advances. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 24
The future in the care of the cervical spine: interbody fusion and arthroplasty. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 155
Bone morphogenetic protein–2
Bone morphogenetic proteins in anterior lumbar interbody fusion: old techniques and new technologies. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 254
Bone morphogenetic protein–6
The use of bone morphogenetic protein–6 gene therapy for percutaneous spinal fusion in rabbits, 90
Brachial plexus
Cervical radiculopathy, entrapment neuropathy, and thoracic outlet syndrome: how to differentiate? Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 179
Burst fracture
Percutaneous vertebroplasty for the treatment of burst fractures. Case report, 228

C1–2 distraction injury
Vertical atlantoaxial distraction injuries: radiological criteria and clinical implications, 273
C1–2 fixation
Vertical atlantoaxial distraction injuries: radiological criteria and clinical implications, 273
Cadaver
The V_2 segment of the vertebral artery and its branches, 299
Cage
Bone morphogenetic proteins in anterior lumbar interbody fusion: old techniques and new technologies. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 254
Carbon fiber cage
Clinical outcomes and complications associated with pedicle screw fixation–augmented lumbar interbody fusion, 261
Cauda equina
Surgical treatment of lumbosacral plexus injuries, 64
Cervical compression myelopathy
Does chronic cervical myelopathy affect respiratory function? 175
Cervical disc
The future in the care of the cervical spine: interbody fusion and arthroplasty. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 155
Cervical instability
Anterior atlas fracture following suboccipital decompression for Chiari I malformation. Report of two cases, 137
Cervical myelopathy
Long-term results of expansive open-door laminoplasty for ossification of the posterior longitudinal ligament of the cervical spine, 168
Metabolic neuroimaging of the cervical spinal cord in patients with compressive myelopathy: a high-resolution positron emission tomography study, 72
Cervical radiculopathy
The impact of minimally invasive cervical spine surgery. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 43
Cervical spine
A comparison of simulator-tested and -retrieved cervical disc prostheses. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 202
An anatomical study of the C-2 pedicle, 306
Cervical magnetic resonance imaging abnormalities not predictive of cervical spine instability in traumatically injured patients. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 39
Cervical radiculopathy, entrapment neuropathy, and thoracic outlet syndrome: how to differentiate? Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 179
Evaluation and treatment of congenital and developmental anomalies of the cervical spine. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 188
Fusion rate: a time-to-event phenomenon, 47
Insertion torque and pullout force of rescue screws for anterior cervical plate fixation in a fatigued initial pilot hole, 198
Suspended laminoplasty for wide posterior cervical decompression and intradural access: results, advantages, and complications, 80
The V_2 segment of the vertebral artery and its branches, 299
Three-level and four-level anterior cervical discectomies and titanium cage–augmented fusion with and without plate fixation, 160
Trevor disease of the spine. Case report, 342
Vertebral synovial chondromatosis. Report of two cases and review of the literature, 211
Charcot spinal arthropathy
Charcot spine: a complication of medullary arteriovenous malformation. Case illustration, 141
Chiari malformation
Anterior atlas fracture following suboccipital decompression for Chiari I malformation. Report of two cases, 137
Chondromatosis
Vertebral synovial chondromatosis. Report of two cases and review of the literature, 211
Chondrosarcoma
Vertebral synovial chondromatosis. Report of two cases and review of the literature, 211
Chronic disease
Does chronic cervical myelopathy affect respiratory function? 175
Complication
Vulnerability of the subcostal nerve to injury during bone graft harvesting from the iliac crest, 87
Compression fracture
Percutaneous vertebroplasty for the treatment of burst fractures. Case report, 228
Congenital malformation
Evaluation and treatment of congenital and developmental anomalies of the cervical spine. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 188
Congenital scoliosis
Evaluation and treatment of congenital and developmental anomalies of the cervical spine. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 188
Craniovertebral anomaly
Treatment of basilar invagination by atlantoaxial joint distraction and direct lateral mass fixation, 281

Craniovertebral junction
Anomalous vertebral artery at the craniovertebral junction in a patient with Down syndrome. Case report, 338
Vertical atlantoaxial distraction injuries: radiological criteria and clinical implications, 273

Decompression
Lumbar stenosis: a personal record. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 31
Prospective outcomes evaluation after decompression with or without instrumented fusion for lumbar stenosis and degenerative Grade I spondylolisthesis, 267
Suspended laminoplasty for wide posterior cervical decompression and intradural access: results, advantages, and complications, 80
Degenerative disc disease
Bone morphogenetic proteins in anterior lumbar interbody fusion: old techniques and new technologies. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 254
Clinical outcomes and complications associated with pedicle screw fixation–augmented lumbar interbody fusion, 261
Contribution of recombinant human bone morphogenetic protein–2 to the rapid creation of interbody fusion when used in transforaminal lumbar interbody fusion: a preliminary report. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 19
Lumbar interbody fusion: state-of-the-art technical advances. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 24
Disc arthroplasty
A comparison of simulator-tested and -retrieved cervical disc prostheses. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 202
disc degeneration
A comparison of simulator-tested and -retrieved cervical disc prostheses. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 202
Discectomy
Thoracic microendoscopic discectomy, 58
Three-level and four-level anterior cervical discectomies and titanium cage–augmented fusion with and without plate fixation, 160
Down syndrome
Anomalous vertebral artery at the craniovertebral junction in a patient with Down syndrome. Case report, 338
Dural arteriovenous fistula
Positional vomiting due to a thoracic spinal dural arteriovenous fistula. Case report, 219
Dynamic radiography
Cervical magnetic resonance imaging abnormalities not predictive of cervical spine instability in traumatically injured patients. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 39
Dysplasia epiphysialis hemimelica
Trevor disease of the spine. Case report, 342

Elastic modulus
Mechanical properties and function of the spinal pia mater, 122
Embolization
Single-stage posterolateral transpedicular approach for resection of epidural metastatic spine tumors involving the vertebral body with circumferential reconstruction: results in 140 patients. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 287
Endoscopy
The impact of minimally invasive cervical spine surgery. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 43
Enoxaparin
Spontaneous spinal hematomas and low-molecular-weight heparin. Report of four cases and review of the literature, 232
Entrapment neuropathy
Cervical radiculopathy, entrapment neuropathy, and thoracic outlet syndrome: how to differentiate? Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 179
Expansive laminoplasty
Long-term results of expansive open-door laminoplasty for ossification of the posterior longitudinal ligament of the cervical spine, 168
Explant analysis
A comparison of simulator-tested and -retrieved cervical disc prostheses. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 202

Fatigue test
Single-unit artificial intervertebral disc, 95
Fusion
Fusion rate: a time-to-event phenomenon, 47
Prospective outcomes evaluation after decompression with or without instrumented fusion for lumbar stenosis and degenerative Grade I spondylolisthesis, 267
The future in the care of the cervical spine: interbody fusion and arthroplasty. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 155
Vulnerability of the subcostal nerve to injury during bone graft harvesting from the iliac crest, 87

Gene therapy
The use of bone morphogenetic protein–6 gene therapy for percutaneous spinal fusion in rabbits, 90
Grip strength
Cervical spinal cord delivery of a rabies G protein pseudotyped lentiviral vector in the SOD-1 transgenic mouse. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 128

Hemangioblastoma
Thoracic spinal nerve hemangioblastoma. Case illustration, 142
Herniation
Transdural herniation of the thoracic spinal cord: untethering via a posterolateral transpedicular approach. Report of three cases, 223
Hydrogel
Mechanically engineered hydrogel scaffolds for axonal growth and angiogenesis after transplantation in spinal cord injury, 322

Inducible nitric oxide synthase
Inhibition of the nuclear factor–κB activation with pyrrolidine dithiocarbamate attenuating inflammation and oxidative stress after experimental spinal cord trauma in rats, 311
Instrumentation
Selection of instrumentation and fusion levels for scoliosis: where to

start and where to stop. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 1
Single-stage posterolateral transpedicular approach for resection of epidural metastatic spine tumors involving the vertebral body with circumferential reconstruction: results in 140 patients. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 287
Intervertebral disc
Thoracic microendoscopic discectomy, 58
Intradural spinal tumor
Suspended laminoplasty for wide posterior cervical decompression and intradural access: results, advantages, and complications, 80
Intraoperative monitoring
Multimodality intraoperative monitoring during complex lumbosacral procedures: indications, techniques, and long-term follow-up review of 61 consecutive cases, 243
Isthmus
An anatomical study of the C-2 pedicle, 306

Juxtafacet cyst
Synovial cysts of the thoracic spine, 52

Kaplan–Meier method
Fusion rate: a time-to-event phenomenon, 47
Klippel–Feil syndrome
Evaluation and treatment of congenital and developmental anomalies of the cervical spine. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 188
Kyphosis
Evaluation and treatment of adult spinal deformity. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 9
Paleopathological examination of medieval spines with exceptional thoracic kyphosis most likely secondary to spinal tuberculosis. Historical vignette, 238

Laminectomy
Synovial cysts of the thoracic spine, 52
Laminoforaminotomy
The impact of minimally invasive cervical spine surgery. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 43
Laminoplasty
Suspended laminoplasty for wide posterior cervical decompression and intradural access: results, advantages, and complications, 80
Lentiviral vector
Cervical spinal cord delivery of a rabies G protein pseudotyped lentiviral vector in the SOD-1 transgenic mouse. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 128
Letters
Atlantoaxial instability, 347
Locomotor score
Cervical spinal cord delivery of a rabies G protein pseudotyped lentiviral vector in the SOD-1 transgenic mouse. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 128
Low-back pain
Contribution of recombinant human bone morphogenetic protein–2 to the rapid creation of interbody fusion when used in transforaminal lumbar interbody fusion: a preliminary report. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 19
Lumbar interbody fusion: state-of-the-art technical advances. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 24

Lumbar spine
Bone morphogenetic proteins in anterior lumbar interbody fusion: old techniques and new technologies. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 254
Lumbar stenosis: a personal record. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 31
Multimodality intraoperative monitoring during complex lumbosacral procedures: indications, techniques, and long-term follow-up review of 61 consecutive cases, 243
Neurological complications of lumbar artificial disc replacement and comparison of clinical results with those related to lumbar arthrodesis in the literature: results of a multicenter, prospective, randomized investigational device exemption study of Charité intervertebral disc. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 143
Prospective outcomes evaluation after decompression with or without instrumented fusion for lumbar stenosis and degenerative Grade I spondylolisthesis, 267
Lumbosacral plexus injury
Surgical treatment of lumbosacral plexus injuries, 64

Magnetic resonance imaging
Cervical magnetic resonance imaging abnormalities not predictive of cervical spine instability in traumatically injured patients. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 39
Metaanalysis
Neurological complications of lumbar artificial disc replacement and comparison of clinical results with those related to lumbar arthrodesis in the literature: results of a multicenter, prospective, randomized investigational device exemption study of Charité intervertebral disc. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 143
Microendoscopic discectomy
Thoracic microendoscopic discectomy, 58
Minimally invasive surgery
Minimally invasive delivery of stem cells for spinal cord injury: advantages of the lumbar puncture technique, 330
The impact of minimally invasive cervical spine surgery. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 43
Mouse
Cervical spinal cord delivery of a rabies G protein pseudotyped lentiviral vector in the SOD-1 transgenic mouse. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 128
Myelopathy
Suspended laminoplasty for wide posterior cervical decompression and intradural access: results, advantages, and complications, 80
Synovial cysts of the thoracic spine, 52

Nerve regeneration
Surgical treatment of lumbosacral plexus injuries, 64

Nerve transfer
Surgical treatment of lumbosacral plexus injuries, 64
Neuralgic amyotrophy
Cervical radiculopathy, entrapment neuropathy, and thoracic outlet syndrome: how to differentiate? Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 179
Neurological complication
Neurological complications of lumbar artificial disc replacement and comparison of clinical results with those related to lumbar arthrodesis in the literature: results of a multicenter, prospective, randomized investigational device exemption study of Charité intervertebral disc. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 143
Nuclear factor–κB
Inhibition of the nuclear factor–κB activation with pyrrolidine dithiocarbamate attenuating inflammation and oxidative stress after experimental spinal cord trauma in rats, 311

Occipitoatlantal dislocation
Vertical atlantoaxial distraction injuries: radiological criteria and clinical implications, 273
Ossification of the posterior longitudinal ligament
Long-term results of expansive open-door laminoplasty for ossification of the posterior longitudinal ligament of the cervical spine, 168
Osteochondroma
Trevor disease of the spine. Case report, 342
Osteogenesis imperfecta
Multiple vertebral fractures in osteogenesis imperfecta treated by vertebroplasty. Case illustration, 237
Osteoporosis
Insertion torque and pullout force of rescue screws for anterior cervical plate fixation in a fatigued initial pilot hole, 198

Pain
Vulnerability of the subcostal nerve to injury during bone graft harvesting from the iliac crest, 87
Paleopathology
Paleopathological examination of medieval spines with exceptional thoracic kyphosis most likely secondary to spinal tuberculosis. Historical vignette, 238
Pediatric neurosurgery
Anomalous vertebral artery at the craniovertebral junction in a patient with Down syndrome. Case report, 338
Pedicle
An anatomical study of the C-2 pedicle, 306
Pedicle screw
Clinical outcomes and complications associated with pedicle screw fixation–augmented lumbar interbody fusion, 261
Pedicle screw fixation
Biomechanical testing of anterior and posterior thoracolumbar instrumentation in the cadaveric spine. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 116
Percutaneous vertebroplasty
Multiple vertebral fractures in osteogenesis imperfecta treated by vertebroplasty. Case illustration, 237
Percutaneous vertebroplasty for the treatment of burst fractures. Case report, 228
Peripheral nerve
Vulnerability of the subcostal nerve to injury during bone graft harvesting from the iliac crest, 87
Pia mater
Mechanical properties and function of the spinal pia mater, 122
Positional vomiting
Positional vomiting due to a thoracic spinal dural arteriovenous fistula. Case report, 219
Positron emission tomography
Metabolic neuroimaging of the cervical spinal cord in patients with compressive myelopathy: a high-resolution positron emission tomography study, 72
Posterior instrumentation
Biomechanical testing of anterior and posterior thoracolumbar instrumentation in the cadaveric spine. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 116
Posterior lumbar interbody fusion
Clinical outcomes and complications associated with pedicle screw fixation–augmented lumbar interbody fusion, 261
Posterior transpedicular fixation
A biomechanical comparison of three surgical approaches in bilateral subaxial cervical facet dislocation, 108
Posterior wiring procedure
A biomechanical comparison of three surgical approaches in bilateral subaxial cervical facet dislocation, 108
Posterolateral approach
Single-stage posterolateral transpedicular approach for resection of epidural metastatic spine tumors involving the vertebral body with circumferential reconstruction: results in 140 patients. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 287
Transdural herniation of the thoracic spinal cord: untethering via a posterolateral transpedicular approach. Report of three cases, 223
Prospective clinical trial
Prospective outcomes evaluation after decompression with or without instrumented fusion for lumbar stenosis and degenerative Grade I spondylolisthesis, 267
Pyrrolidine dithiocarbamate
Inhibition of the nuclear factor–κB activation with pyrrolidine dithiocarbamate attenuating inflammation and oxidative stress after experimental spinal cord trauma in rats, 311

Quadriparesis
Evaluation and treatment of congenital and developmental anomalies of the cervical spine. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 188

Radiculopathy
Cervical radiculopathy, entrapment neuropathy, and thoracic outlet syndrome: how to differentiate? Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 179
Trevor disease of the spine. Case report, 342
Rat
Inhibition of the nuclear factor–κB activation with pyrrolidine dithiocarbamate attenuating inflammation and oxidative stress after experimental spinal cord trauma in rats, 311
Minimally invasive delivery of stem cells for spinal cord injury: advantages of the lumbar puncture technique, 330
Recurrence
Clinical outcomes and complications associated with pedicle screw fixation–augmented lumbar interbody fusion, 261

Remote delivery
Cervical spinal cord delivery of a rabies G protein pseudotyped lentiviral vector in the SOD-1 transgenic mouse. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 128
Respiratory function
Does chronic cervical myelopathy affect respiratory function? 175

Sacral spine
Multimodality intraoperative monitoring during complex lumbosacral procedures: indications, techniques, and long-term follow-up review of 61 consecutive cases, 243
Scoliosis
Evaluation and treatment of adult spinal deformity. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 9
Selection of instrumentation and fusion levels for scoliosis: where to start and where to stop. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 1
Screw
Insertion torque and pullout force of rescue screws for anterior cervical plate fixation in a fatigued initial pilot hole, 198
Secondary injury
Inhibition of the nuclear factor–κB activation with pyrrolidine dithiocarbamate attenuating inflammation and oxidative stress after experimental spinal cord trauma in rats, 311
Silicone
Single-unit artificial intervertebral disc, 95
Spinal cord
Mechanical properties and function of the spinal pia mater, 122
Metabolic neuroimaging of the cervical spinal cord in patients with compressive myelopathy: a high-resolution positron emission tomography study, 72
Transdural herniation of the thoracic spinal cord: untethering via a posterolateral transpedicular approach. Report of three cases, 223
Spinal cord injury
Inhibition of the nuclear factor–κB activation with pyrrolidine dithiocarbamate attenuating inflammation and oxidative stress after experimental spinal cord trauma in rats, 311
Mechanically engineered hydrogel scaffolds for axonal growth and angiogenesis after transplantation in spinal cord injury, 322
Minimally invasive delivery of stem cells for spinal cord injury: advantages of the lumbar puncture technique, 330
Spinal correction
Evaluation and treatment of adult spinal deformity. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 9
Spinal deformity
Evaluation and treatment of adult spinal deformity. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 9
Spinal fusion
Selection of instrumentation and fusion levels for scoliosis: where to start and where to stop. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 1
The use of bone morphogenetic protein–6 gene therapy for percutaneous spinal fusion in rabbits, 90
Three-level and four-level anterior cervical discectomies and titanium cage–augmented fusion with and without plate fixation, 160
Spinal hematoma
Spontaneous spinal hematomas and low-molecular-weight heparin. Report of four cases and review of the literature, 232
Spinal injury
Cervical magnetic resonance imaging abnormalities not predictive of cervical spine instability in traumatically injured patients. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 39
Spinal nerve
Thoracic spinal nerve hemangioblastoma. Case illustration, 142
Spinal root repair
Surgical treatment of lumbosacral plexus injuries, 64
Spinal tuberculosis
Paleopathological examination of medieval spines with exceptional thoracic kyphosis most likely secondary to spinal tuberculosis. Historical vignette, 238
Spine
Single-stage posterolateral transpedicular approach for resection of epidural metastatic spine tumors involving the vertebral body with circumferential reconstruction: results in 140 patients. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 287
Vulnerability of the subcostal nerve to injury during bone graft harvesting from the iliac crest, 87
Spine metastasis
Single-stage posterolateral transpedicular approach for resection of epidural metastatic spine tumors involving the vertebral body with circumferential reconstruction: results in 140 patients. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 287
Spondylolisthesis
Prospective outcomes evaluation after decompression with or without instrumented fusion for lumbar stenosis and degenerative Grade I spondylolisthesis, 267
Suspended laminoplasty for wide posterior cervical decompression and intradural access: results, advantages, and complications, 80
Spondylosis
The impact of minimally invasive cervical spine surgery. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 43
Stem cell transplantation
Minimally invasive delivery of stem cells for spinal cord injury: advantages of the lumbar puncture technique, 330
Stenosis
Lumbar stenosis: a personal record. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 31
Prospective outcomes evaluation after decompression with or without instrumented fusion for lumbar stenosis and degenerative Grade I spondylolisthesis, 267
Suspended laminoplasty for wide posterior cervical decompression and intradural access: results, advantages, and complications, 80
Subluxation
Selection of instrumentation and fusion levels for scoliosis: where to start and where to stop. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 1
Synovial cyst
Synovial cysts of the thoracic spine, 52
Synovium
Vertebral synovial chondromatosis. Report of two cases and review of the literature, 211

Thoracic outlet syndrome
Cervical radiculopathy, entrapment neuropathy, and thoracic outlet syndrome: how to differentiate? Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 179
Thoracic spine
Positional vomiting due to a thoracic spinal dural arteriovenous fistula. Case report, 219

Synovial cysts of the thoracic spine, 52
Thoracic microendoscopic discectomy, 58
Thoracic spinal nerve hemangioblastoma. Case illustration, 142
Transdural herniation of the thoracic spinal cord: untethering via a posterolateral transpedicular approach. Report of three cases, 223
Thoracolumbar burst fracture
Biomechanical testing of anterior and posterior thoracolumbar instrumentation in the cadaveric spine. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 116
Thoracolumbar corpectomy
Biomechanical testing of anterior and posterior thoracolumbar instrumentation in the cadaveric spine. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 116
Titanium cage
Three-level and four-level anterior cervical discectomies and titanium cage–augmented fusion with and without plate fixation, 160
Torticollis
Treatment of basilar invagination by atlantoaxial joint distraction and direct lateral mass fixation, 281
Transfacetopedicular fixation
A biomechanical comparison of supplementary posterior translaminar facet and transfacetopedicular screw fixation after anterior lumbar interbody fusion, 101
Transforaminal lumbar interbody fusion
Contribution of recombinant human bone morphogenetic protein–2 to the rapid creation of interbody fusion when used in transforaminal lumbar interbody fusion: a preliminary report. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 19
Lumbar interbody fusion: state-of-the-art technical advances. Invited submission from the Joint Section Meeting on Disorders of the Spine and Peripheral Nerves, March 2004, 24
Translaminar facet screw fixation
A biomechanical comparison of supplementary posterior translaminar facet and transfacetopedicular screw fixation after anterior lumbar interbody fusion, 101
Trevor disease
Trevor disease of the spine. Case report, 342

Untethering
Transdural herniation of the thoracic spinal cord: untethering via a posterolateral transpedicular approach. Report of three cases, 223
Urethral sphincter
Multimodality intraoperative monitoring during complex lumbosacral procedures: indications, techniques, and long-term follow-up review of 61 consecutive cases, 243

V_2 segment
The V_2 segment of the vertebral artery and its branches, 299
Vertebral artery
Anomalous vertebral artery at the craniovertebral junction in a patient with Down syndrome. Case report, 338
The V_2 segment of the vertebral artery and its branches, 299
Vertebral body
Single-unit artificial intervertebral disc, 95
Vertebral compression fracture
Multiple vertebral fractures in osteogenesis imperfecta treated by vertebroplasty. Case illustration, 237
Vertigo
Positional vomiting due to a thoracic spinal dural arteriovenous fistula. Case report, 219
von Hippel–Lindau disease
Thoracic spinal nerve hemangioblastoma. Case illustration, 142

[18F]fluorodeoxyglucose
Metabolic neuroimaging of the cervical spinal cord in patients with compressive myelopathy: a high-resolution positron emission tomography study, 72

Journal of Neurosurgery: Pediatrics

August 2004, Volume 101, Number 1

CLINICAL ARTICLES:

Juvenile pilocytic astrocytoma of the brainstem in children. JOHN KESTLE, JEANNETTE J. TOWNSEND, DOUGLAS L. BROCKMEYER, AND MARION L. WALKER 1

Clinical outcomes after corpus callosotomy in patients with bihemispheric malformations of cortical development. KENSUKE KAWAI, HIROYUKI SHIMIZU, AKIRA YAGISHITA, TAKETOSHI MAEHARA, AND KIMIKO TAMAGAWA 7

Nonsynostotic scaphocephaly: the so-called sticky sagittal suture. JAMES E. BAUMGARTNER, KELLY SEYMOUR-DEMPSEY, JOHN F. TEICHGRAEBER, JAMES J. XIA, AMY L. WALLER, AND JAIME GATENO 16

Magnetic resonance imaging evidence of posterior pharynx denervation in pediatric patients with Chiari I malformation and absent gag reflex. R. SHANE TUBBS, DANIEL WEBB, MATTHEW D. SMYTH, AND W. JERRY OAKES 21

Hydrocephalus in children with middle fossa arachnoid cysts. MICHAEL L. LEVY, HAL S. MELTZER, SAMUEL HUGHES, HENRY E. ARYAN, KEVIN YOO, AND ARUN PAUL AMAR 25

Deep venous thrombosis in children and adolescents. MICHAEL L. LEVY, ROBERT C. GRANVILLE, DAVID HART, AND HAL MELTZER .. 32

Management of accidental minor head injuries in children: a prospective outcomes study. MARK S. DIAS, KATHLEEN A. LILLIS, CARMELA CALVO, STEVEN H. SHAHA, AND VEETAI LI 38

Imaging of head injuries in infants: temporal correlates and forensic implications for the diagnosis of child abuse. MATTHIEU VINCHON, NATHALIE NOULÉ, PATRICE JISSENDI TCHOFO, GUSTAVO SOTO-ARES, CATHERINE FOURIER, AND PATRICK DHELLEMMES 44

Complications of intracranial pressure monitoring in children with head trauma. RICHARD C. E. ANDERSON, PETER KAN, PAUL KLIMO, DOUGLAS L. BROCKMEYER, MARION L. WALKER, AND JOHN R. W. KESTLE 53

Effect of selective dorsal rhizotomy on need for orthopedic surgery for spastic quadriplegic cerebral palsy: long-term outcome analysis in relation to age. DONNCHA F. O'BRIEN, TAE SUNG PARK, JOAN A. PUGLISI, DAVID R. COLLINS, AND ERIC C. LEUTHARDT . 59

Performance and complications associated with the Synchromed 10-ml infusion pump for intrathecal baclofen administration in children. A. LELAND ALBRIGHT, YASSER AWAAD, MICHAEL MUHONEN, WILLIAM R. BOYDSTON, RICHARD GILMARTIN, LINDA E. KRACH, MICHAEL TURNER, KATHRYN A. ZIDEK, ED WRIGHT, DALE SWIFT, AND KAREN BLOOM 64

Searching for motor functions in dysgenic cortex: a clinical transcranial magnetic stimulation and functional magnetic resonance imaging study. MARTIN STAUDT, INGEBORG KRÄGELOH-MANN, HANS HOLTHAUSEN, CHRISTIAN GERLOFF, AND WOLFGANG GRODD 69

LABORATORY INVESTIGATIONS:

End-to-side neurorrhaphies in a rodent model of peripheral nerve injury: a preliminary report of a novel technique. P. DAVID ADELSON, EUGENE A. BONAROTI, TODD P. THOMPSON, MINHDUC TRAN, AND N. AKE NYSTROM 78

Comparative genomic hybridization analysis of pediatric adamantinomatous craniopharyngiomas and a review of the literature. MAISA YOSHIMOTO, SILVIA REGINA CAMINADA DE TOLEDO, NASILA SABA DA SILVA, JANE BAYANI, ANA PAULA ANTUNES PASCALICCHIO BERTOZZI, JOÃO NORBERTO STAVALE, SERGIO CAVALHEIRO, JOYCE ANDERSON DUFFLES ANDRADE, MARIA ZIELENSKA, AND JEREMY A. SQUIRE 85

Surfactant poloxamer 188–related decreases in inflammation and tissue damage after experimental brain injury in rats. DANIEL J. CURRY, DAVID A. WRIGHT, RAPHAEL C. LEE, UN JUNG KANG, AND DAVID M. FRIM 91

CASE REPORTS:

Giant Gram-negative brain abscesses. Report of two cases. CLARENCE S. GREEN JR., MICHELE CHEUNG, AND JOSIE PERDUE 97

Severe posttraumatic craniocervical instability in the very young patient. Report of three cases. SAADI GHATAN, DAVID W. NEWELL, M. SEAN GRADY, SOHAIL K. MIZRA, JENS R. CHAPMAN, FREDRICK A. MANN, AND RICHARD G. ELLENBOGEN 102

Expanding occult intrasacral meningocele associated with diastematomyelia and multiple vertebral anomalies. Case report. ÖZGÜR KILICKESMEZ, YUKSEL BARUT, AND EROL TASDEMIROGLU 108

Intraparenchymal meningioma in a child. Case report and review of the literature. SELHAN KARADERELER, FUGEN AKER, AND ZAFER BERKMAN 112

Malignant prolactinoma with multiple bone and pulmonary metastases. Case report. CRISTINA LAMAS, RAÚL NÚÑEZ, JOSÉ GARCÍA-URÍA, CLARA SALAS, GERTRUDIS SAUCEDO, JAVIER ESTRADA, AVELINO PARAJÓN, AND TOMÁS LUCAS 116

CASE ILLUSTRATION:

Leptomeningeal hemangioblastoma. Case illustration. CLAUDIO AGOSTINELLI, FEDERICO RONCAROLI, ERCOLE GALASSI, BRUNO BERNARDI, NICOLA ACCIARRI, AND GIOVANNI TANI 122

NEUROSURGICAL FORUM: Erratum 123

Journal of Neurosurgery: Pediatrics

November 2004, Volume 101, Number 2

SPECIAL ARTICLE:

The past, present, and future of pediatric neurosurgery. Matson Lecture, May 4, 2004 A. LELAND ALBRIGHT 125

CLINICAL ARTICLES:

Assessing the validity of the endoscopic shunt insertion trial: did surgical experience affect the results? PAUL KLIMO JR., CLINTON J. THOMPSON, JAMES DRAKE, AND JOHN R. W. KESTLE 130

An instrument to measure the health status in children with hydrocephalus: the Hydrocephalus Outcome Questionnaire. ABHAYA V. KULKARNI, DORON RABIN, AND JAMES M. DRAKE 134

Measuring the health status of children with hydrocephalus by using a new outcome measure. ABHAYA V. KULKARNI, JAMES M. DRAKE, DORON RABIN, PETER B. DIRKS, ROBIN P. HUMPHREYS, AND JAMES T. RUTKA 141

The use of quick-brain magnetic resonance imaging in the evaluation of shunt-treated hydrocephalus. BERMANS J. ISKANDAR, JASON M. SANSONE, JOSHUA MEDOW, AND HOWARD A. ROWLEY 147

Critical risk factors for intellectual impairment in children with posterior fossa tumors: the role of cerebellar damage. JACQUES GRILL, DELPHINE VIGUIER, VIRGINIE KIEFFER, CHRISTINE BULTEAU, CHRISTIAN SAINTE-ROSE, OLIVIER HARTMANN, CHANTAL KALIFA, AND GEORGES DELLATOLAS 152

The effects of hydrocephalus on intelligence quotient in children with localized infratentorial ependymoma before and after focal radiation therapy. THOMAS E. MERCHANT, HEATHER LEE, JUNHONG ZHU, XIAOPING XIONG, GREGORY WHEELER, SEAN PHIPPS, FREDERICK A. BOOP, AND ROBERT A. SANFORD 159

Foramen magnum cerebrospinal fluid flow characteristics in children with Chiari I malformation before and after craniocervical decompression. BERMANS J. ISKANDAR, MARK QUIGLEY, AND VICTOR M. HAUGHTON 169

A critical analysis of the Chiari 1.5 malformation. R. SHANE TUBBS, BERMANS J. ISKANDAR, ALFRED A. BARTOLUCCI, AND W. JERRY OAKES 179

Dura-splitting decompression of the craniocervical junction: reduced operative time, hospital stay, and cost with equivalent early outcome. FARHAD M. LIMONADI AND NATHAN R. SELDEN 184

Treatment of basilar invagination associated with Chiari I malformations in the pediatric population: cervical reduction and posterior occipitocervical fusion. LOUIS J. KIM, HAROLD L. REKATE, JEFFREY D. KLOPFENSTEIN, AND VOLKER K. H. SONNTAG 189

LABORATORY INVESTIGATION:

Effects of hydrocephalus and ventriculoperitoneal shunt therapy on afferent and efferent connections in the feline sensorimotor cortex. RAMIN ESKANDARI, JAMES P. MCALLISTER II, JANET M. MILLER, YUCHAN DING, STEVEN D. HAM, DAVID M. SHEARER, AND JOHN S. WAY 196

CASE REPORTS:

Acquired Chiari I malformation following baclofen pump placement in a child. Case report. R SHANE TUBBS, CHARLES LAW, W. JERRY OAKES, AND PAUL A. GRABB 211

Subtemporal decompression for slit-ventricle syndrome: successful outcome after dramatic change in intracranial pressure wave morphology. Report of two cases. RODNEY ALLAN AND RAYMOND CHASELING 214

Frontoethmoidal encephalocele with ocular leakage of cerebrospinal fluid. Case report. SNJEZANA M. SCHÜTT, UWE KEHLER, JAN GLIEMROTH, DIRK PETERSEN, AND JÜRGEN SPERNER 218

Adjustment and malfunction of a programmable valve after exposure to toy magnets. Case report. RICHARD C. E. ANDERSON, MARION L. WALKER, JOHN M. VINER, AND JOHN R. W. KESTLE 222

Spontaneous regression of congenital spinal lipomas of the conus medullaris. Report of two cases. ABHAYA V. KULKARNI, ALAIN PIERRE-KAHN, AND MICHEL ZERAH 226

HISTORICAL VIGNETTE:

Historical vignette. The relationship of the spinal cord to scoliosis. R. SHANE TUBBS, W. JERRY OAKES, AND ROBERT F. HEIMBURGER . 228

Index to
Journal of Neurosurgery: Pediatrics
Volume 101

August and November 2004

Author Index

ACCIARRI N. *See* Agostinelli C, 122
ADELSON PD, BONAROTI EA, THOMPSON TP, TRAN M, NYSTROM NA. End-to-side neurorrhaphies in a rodent model of peripheral nerve injury: a preliminary report of a novel technique, 78
AGOSTINELLI C, RONCAROLI F, GALASSI E, BERNARDI B, ACCIARRI N, TANI G. Leptomeningeal hemangioblastoma. Case illustration, 122
AKER F. *See* Karadereler S, 112
ALBRIGHT AL. The past, present, and future of pediatric neurosurgery. Matson Lecture, May 4, 2004, 125
———, AWAAD Y, MUHONEN M, BOYDSTON WR, GILMARTIN R, KRACH LE, TURNER M, ZIDEK KA, WRIGHT E, SWIFT D, BLOOM K. Performance and complications associated with the Synchromed 10-ml infusion pump for intrathecal baclofen administration in children, 64
ALLAN R, CHASELING R. Subtemporal decompression for slit-ventricle syndrome: successful outcome after dramatic change in intracranial pressure wave morphology. Report of two cases, 214
AMAR AP. *See* Levy ML, 25
ANDERSON RCE, KAN P, KLIMO P, BROCKMEYER DL, WALKER ML, KESTLE JRW. Complications of intracranial pressure monitoring in children with head trauma, 53
———, WALKER ML, VINER JM, KESTLE JRW. Adjustment and malfunction of a programmable valve after exposure to toy magnets. Case report, 222
ANDRADE JAD. *See* Yoshimoto M, 85
ARYAN HE. *See* Levy ML, 25
AWAAD Y. *See* Albright AL, 64

BARTOLUCCI AA. *See* Tubbs RS, 179
BARUT Y. *See* Kılıçkesmez O, 108
BAUMGARTNER JE, SEYMOUR-DEMPSEY K, TEICHGRAEBER JF, XIA JJ, WALLER AL, GATENO J. Nonsynostotic scaphocephaly: the so-called sticky sagittal suture, 16
BAYANI J. *See* Yoshimoto M, 85
BERKMAN Z. *See* Karadereler S, 112
BERNARDI B. *See* Agostinelli C, 122
BERTOZZI APAP. *See* Yoshimoto M, 85
BLOOM K. *See* Albright AL, 64
BONAROTI EA. *See* Adelson PD, 78
BOOP FA. *See* Merchant TE, 159
BOYDSTON WR. *See* Albright AL, 64
BROCKMEYER DL. *See* Anderson RCE, 53
———. *See* Kestle J, 1
BULTEAU C. *See* Grill J, 152

CALVO C. *See* Dias MS, 38
CAVALHEIRO S. *See* Yoshimoto M, 85
CHAPMAN JR. *See* Ghatan S, 102
CHASELING R. *See* Allan R, 214
CHEUNG M. *See* Greene CS Jr, 97
COLLINS DR. *See* O'Brien DF, 59
CURRY DJ, WRIGHT DA, LEE RC, KANG UJ, FRIM DM. Surfactant poloxamer 188–related decreases in inflammation and tissue damage after experimental brain injury in rats, 91

DA SILVA NS. *See* Yoshimoto M, 85
DE TOLEDO SRC. *See* Yoshimoto M, 85
DELLATOLAS G. *See* Grill J, 152
DHELLEMMES P. *See* Vinchon M, 44
DIAS MS, LILLIS KA, CALVO C, SHAHA SH, LI V. Management of accidental minor head injuries in children: a prospective outcomes study, 38
DING Y. *See* Eskandari R, 196
DIRKS PB. *See* Kulkarni AV, 141
DRAKE J. *See* Klimo P Jr, 130
DRAKE JM. *See* Kulkarni AV, 134, 141

ELLENBOGEN RG. *See* Ghatan S, 102
ESKANDARI R, MCALLISTER JP II, MILLER JM, DING Y, HAM SD, SHEARER DM, WAY JS. Effects of hydrocephalus and ventriculoperitoneal shunt therapy on afferent and efferent connections in the feline sensorimotor cortex, 196
ESTRADA J. *See* Lamas C, 116

FOURIER C. *See* Vinchon M, 44
FRIM DM. *See* Curry DJ, 91

GALASSI E. *See* Agostinelli C, 122
GARCÍA-URÍA J. *See* Lamas C, 116
GATENO J. *See* Baumgartner JE, 16
GERLOFF C. *See* Staudt M, 69
GHATAN S, NEWELL DW, GRADY MS, MIRZA SK, CHAPMAN JR, MANN FA, ELLENBOGEN RG. Severe posttraumatic craniocervical instability in the very young patient. Report of three cases, 102
GILMARTIN R. *See* Albright AL, 64
GLIEMROTH J. *See* Schütt SM, 218
GRABB PA. *See* Tubbs RS, 211

GRADY MS. *See* Ghatan S, 102
GRANVILLE RC. *See* Levy ML, 32
GREENE CS JR, CHEUNG M, PERDUE J. Giant Gram-negative brain abscesses. Report of two cases, 97
GRILL J, VIGUIER D, KIEFFER V, BULTEAU C, SAINTE-ROSE C, HARTMANN O, KALIFA C, DELLATOLAS G. Critical risk factors for intellectual impairment in children with posterior fossa tumors: the role of cerebellar damage, 152
GRODD W. *See* Staudt M, 69

HAM SD. *See* Eskandari R, 196
HART D. *See* Levy ML, 32
HARTMANN O. *See* Grill J, 152
HAUGHTON VM. *See* Iskandar BJ, 169
HEIMBURGER RF. *See* Tubbs RS, 228
HOLTHAUSEN H. *See* Staudt M, 69
HUGHES S. *See* Levy ML, 25
HUMPHREYS RP. *See* Kulkarni AV, 141

ISKANDAR BI. *See* Tubbs RS, 179
———, QUIGLEY M, HAUGHTON VM. Foramen magnum cerebrospinal fluid flow characteristics in children with Chiari I malformation before and after craniocervical decompression, 169
———, SANSONE JM, MEDOW J, ROWLEY HA. The use of quick-brain magnetic resonance imaging in the evaluation of shunt-treated hydrocephalus, 147

KALIFA C. *See* Grill J, 152
KAN P. *See* Anderson RCE, 53
KANG UJ. *See* Curry DJ, 91
KARADERELER S, AKER F, BERKMAN Z. Intraparenchymal meningioma in a child. Case report and review of the literature, 112
KAWAI K, SHIMIZU H, YAGISHITA A, MAEHARA T, TAMAGAWA K. Clinical outcomes after corpus callosotomy in patients with bihemispheric malformations of cortical development, 7
KEHLER U. *See* Schütt SM, 218
KESTLE J, TOWNSEND JJ, BROCKMEYER DL, WALKER ML. Juvenile pilocytic astrocytoma of the brainstem in children, 1
KESTLE JRW. *See* Anderson RCE, 53, 222
———. *See* Klimo P Jr, 130
KIEFFER V. *See* Grill J, 152
KILIÇKESMEZ O, BARUT Y, TASDEMIROGLU E. Expanding occult intrasacral meningocele associated with diastematomyelia and multiple vertebral anomalies. Case report, 108
KIM LJ, REKATE HL, KLOPFENSTEIN JD, SONNTAG VKH. Treatment of basilar invagination associated with Chiari I malformations in the pediatric population: cervical reduction and posterior occipitocervical fusion, 189
KLIMO P. *See* Anderson RCE, 53
KLIMO P JR, THOMPSON CJ, DRAKE J, KESTLE JRW. Assessing the validity of the endoscopic shunt insertion trial: did surgical experience affect the results? 130
KLOPFENSTEIN JD. *See* Kim LJ, 189
KRACH LE. *See* Albright AL, 64
KRÄGELOH-MANN I. *See* Staudt M, 69
KULKARNI AV, DRAKE JM, RABIN D, DIRKS PB, HUMPHREYS RP, RUTKA JT. Measuring the health status of children with hydrocephalus by using a new outcome measure, 141
———, PIERRE-KAHN A, ZERAH M. Spontaneous regression of congenital spinal lipomas of the conus medullaris. Report of two cases, 226
———, RABIN D, DRAKE JM. An instrument to measure the health status in children with hydrocephalus: the Hydrocephalus Outcome Questionnaire, 134

LAMAS C, NÚÑEZ R, GARCÍA-URÍA J, SALAS C, SAUCEDO G, ESTRADA J, PARAJÓN A, LUCAS T. Malignant prolactinoma with multiple bone and pulmonary metastases. Case report, 116
LAW C. *See* Tubbs RS, 211
LEE H. *See* Merchant TE, 159
LEE RC. *See* Curry DJ, 91
LEUTHARDT EC. *See* O'Brien DF, 59
LEVY ML, GRANVILLE RC, HART D, MELTZER H. Deep venous thrombosis in children and adolescents, 32
———, MELTZER HS, HUGHES S, ARYAN HE, YOO K, AMAR AP. Hydrocephalus in children with middle fossa arachnoid cysts, 25
LI V. *See* Dias MS, 38
LILLIS KA. *See* Dias MS, 38
LIMONADI FM, SELDEN NR. Dura-splitting decompression of the craniocervical junction: reduced operative time, hospital stay, and cost with equivalent early outcome, 184
LUCAS T. *See* Lamas C, 116

MAEHARA T. *See* Kawai K, 7
MANN FA. *See* Ghatan S, 102
MCALLISTER JP II. *See* Eskandari R, 196
MEDOW J. *See* Iskandar BJ, 147
MELTZER H. *See* Levy ML, 32
MELTZER HS. *See* Levy ML, 25
MERCHANT TE, LEE H, ZHU J, XIONG X, WHEELER G, PHIPPS S, BOOP FA, SANFORD RA. The effects of hydrocephalus on intelligence quotient in children with localized infratentorial ependymoma before and after focal radiation therapy, 159
MILLER JM. *See* Eskandari R, 196
MIRZA SK. *See* Ghatan S, 102
MUHONEN M. *See* Albright AL, 64

NEWELL DW. *See* Ghatan S, 102
NOULÉ N. *See* Vinchon M, 44
NÚÑEZ R. *See* Lamas C, 116
NYSTROM NA. *See* Adelson PD, 78

O'BRIEN DF, PARK TS, PUGLISI JA, COLLINS DR, LEUTHARDT EC. Effect of selective dorsal rhizotomy on need for orthopedic surgery for spastic quadriplegic cerebral palsy: long-term outcome analysis in relation to age, 59
OAKES WJ. *See* Tubbs RS, 21, 179, 211, 228

PARAJÓN A. *See* Lamas C, 116
PARK TS. *See* O'Brien DF, 59
PERDUE J. *See* Greene CS Jr, 97
PHIPPS S. *See* Merchant TE, 159
PETERSEN D. *See* Schütt SM, 218
PIERRE-KAHN A. *See* Kulkarni AV, 226
PUGLISI JA. *See* O'Brien DF, 59

QUIGLEY M. *See* Iskandar BJ, 169

RABIN D. *See* Kulkarni AV, 134, 141
REKATE HL. *See* Kim LJ, 189
RONCAROLI F. *See* Agostinelli C, 122
ROWLEY HA. *See* Iskandar BJ, 147
RUTKA JT. *See* Kulkarni AV, 141

SAINTE-ROSE C. *See* Grill J, 152
SALAS C. *See* Lamas C, 116
SANFORD RA. *See* Merchant TE, 159
SANSONE JM. *See* Iskandar BJ, 147
SAUCEDO G. *See* Lamas C, 116
SCHÜTT SM, KEHLER U, GLIEMROTH J, PETERSEN D, SPERNER J. Frontoethmoidal encephalocele with ocular leakage of cerebrospinal fluid. Case report, 218
SELDEN NR. *See* Limonadi FM, 184
SEYMOUR-DEMPSEY K. *See* Baumgartner JE, 16
SHAHA SH. *See* Dias MS, 38
SHEARER DM. *See* Eskandari R, 196
SHIMIZU H. *See* Kawai K, 7
SMYTH MD. *See* Tubbs RS, 21
SONNTAG VKH. *See* Kim LJ, 189
SOTO-ARES G. *See* Vinchon M, 44
SPERNER J. *See* Schütt SM, 218
SQUIRE JA. *See* Yoshimoto M, 85
STAUDT M, KRÄGELOH-MANN I, HOLTHAUSEN H, GERLOFF C, GRODD W. Searching for motor functions in dysgenic cortex: a clinical transcranial magnetic stimulation and functional magnetic resonance imaging study, 69
STAVALE JN. *See* Yoshimoto M, 85
SWIFT D. *See* Albright AL, 64

TAMAGAWA K. *See* Kawai K, 7
TANI G. *See* Agostinelli C, 122
TASDEMIROGLU E. *See* Kılıçkesmez O, 108
TCHOFO PJ. *See* Vinchon M, 44
TEICHGRAEBER JF. *See* Baumgartner JE, 16
THOMPSON CJ. *See* Klimo P Jr, 130
THOMPSON TP. *See* Adelson PD, 78
TOWNSEND JJ. *See* Kestle J, 1
TRAN M. *See* Adelson PD, 78
TUBBS RS, ISKANDAR BI, BARTOLUCCI AA, OAKES WJ. A critical analysis of the Chiari 1.5 malformation, 179
———, LAW C, OAKES WJ, GRABB PA. Acquired Chiari I malformation following baclofen pump placement in a child. Case report, 211
———, OAKES WJ, HEIMBURGER RF. The relationship of the spinal cord to scoliosis. Historical vignette, 228
———, WEBB D, SMYTH MD, OAKES WJ. Magnetic resonance imaging evidence of posterior pharynx denervation in pediatric patients with Chiari I malformation and absent gag reflex, 21
TURNER M. *See* Albright AL, 64

VIGUIER D. *See* Grill J, 152
VINCHON M, NOULÉ N, TCHOFO PJ, SOTO-ARES G, FOURIER C, DHELLEMMES P. Imaging of head injuries in infants: temporal correlates and forensic implications for the diagnosis of child abuse, 44
VINER JM. *See* Anderson RCE, 222

WALKER ML. *See* Anderson RCE, 53, 222
———. *See* Kestle J, 1
WALLER AL. *See* Baumgartner JE, 16
WANG JC. Erratum, 123
WAY JS. *See* Eskandari R, 196
WEBB D. *See* Tubbs RS, 21
WHEELER G. *See* Merchant TE, 159
WRIGHT DA. *See* Curry DJ, 91
WRIGHT E. *See* Albright AL, 64

XIA JJ. *See* Baumgartner JE, 16
XIONG X. *See* Merchant TE, 159

YAGISHITA A. *See* Kawai K, 7
YOO K. *See* Levy ML, 25
YOSHIMOTO M, DE TOLEDO SRC, DA SILVA NS, BAYANI J, BERTOZZI APAP, STAVALE JN, CAVALHEIRO S, ANDRADE JAD, ZIELENSKA M, SQUIRE JA. Comparative genomic hybridization analysis of pediatric adamantinomatous craniopharyngiomas and a review of the literature, 85

ZERAH M. *See* Kulkarni AV, 226
ZHU J. *See* Merchant TE, 159
ZIDEK KA. *See* Albright AL, 64
ZIELENSKA M. *See* Yoshimoto M, 85

Subject Index

Ambulatory function
  Effect of selective dorsal rhizotomy on need for orthopedic surgery for spastic quadriplegic cerebral palsy: long-term outcome analysis in relation to age, 59
American Association of Neurological Surgeons
  The past, present, and future of pediatric neurosurgery. Matson Lecture, May 4, 2004, 125
Arachnoid cyst
  Hydrocephalus in children with middle fossa arachnoid cysts, 25
Astrocytoma
  Juvenile pilocytic astrocytoma of the brainstem in children, 1
Atlas
  Severe posttraumatic craniocervical instability in the very young patient. Report of three cases, 102
Axis
  Severe posttraumatic craniocervical instability in the very young patient. Report of three cases, 102
Axonal transport
  Effects of hydrocephalus and ventriculoperitoneal shunt therapy on afferent and efferent connections in the feline sensorimotor cortex, 196

Baclofen
  Performance and complications associated with the Synchromed 10-ml infusion pump for intrathecal baclofen administration in children, 64
Basilar invagination
  Treatment of basilar invagination associated with Chiari I malformations in the pediatric population: cervical reduction and posterior occipitocervical fusion, 189
Brain abscess
  Giant Gram-negative brain abscesses. Report of two cases, 97
Brain tumor
  Intraparenchymal meningioma in a child. Case report and review of the literature, 112
Brainstem
  Juvenile pilocytic astrocytoma of the brainstem in children, 1

Callosotomy
  Clinical outcomes after corpus callosotomy in patients with bihemispheric malformations of cortical development, 7
Cat
  Effects of hydrocephalus and ventriculoperitoneal shunt therapy on afferent and efferent connections in the feline sensorimotor cortex, 196
Cerebral palsy
  Performance and complications associated with the Synchromed 10-ml infusion pump for intrathecal baclofen administration in children, 64
Cerebrospinal fluid
  Acquired Chiari I malformation following baclofen pump placement in a child. Case report, 211
  Foramen magnum cerebrospinal fluid flow characteristics in children with Chiari I malformation before and after craniocervical decompression, 169
  Frontoethmoidal encephalocele with ocular leakage of cerebrospinal fluid. Case report, 218
Cerebrospinal fluid shunt
  An instrument to measure the health status in children with hydrocephalus: the Hydrocephalus Outcome Questionnaire, 134
  Measuring the health status of children with hydrocephalus by using a new outcome measure, 141
Chemotaxis
  Surfactant poloxamer 188–related decreases in inflammation and tissue damage after experimental brain injury in rats, 91
Chiari malformation
  A critical analysis of the Chiari 1.5 malformation, 179
  Dura-splitting decompression of the craniocervical junction: reduced operative time, hospital stay, and cost with equivalent early outcome, 184
  Treatment of basilar invagination associated with Chiari I malformations in the pediatric population: cervical reduction and posterior occipitocervical fusion, 189
Child abuse
  Imaging of head injuries in infants: temporal correlates and forensic implications for the diagnosis of child abuse, 44
Children
  Complications of intracranial pressure monitoring in children with head trauma, 53
Cognition
  Critical risk factors for intellectual impairment in children with posterior fossa tumors: the role of cerebellar damage, 152
  The effects of hydrocephalus on intelligence quotient in children with localized infratentorial ependymoma before and after focal radiation therapy, 159
Comparative genomic hybridization
  Comparative genomic hybridization analysis of pediatric adamantinomatous craniopharyngiomas and a review of the literature, 85
Complication
  Acquired Chiari I malformation following baclofen pump placement in a child. Case report, 211
Complications
  Performance and complications associated with the Synchromed 10-ml infusion pump for intrathecal baclofen administration in children, 64
Concussion
  Management of accidental minor head injuries in children: a prospective outcomes study, 38
Connectivity
  Effects of hydrocephalus and ventriculoperitoneal shunt therapy on

afferent and efferent connections in the feline sensorimotor cortex, 196
Cortical malformation
Searching for motor functions in dysgenic cortex: a clinical transcranial magnetic stimulation and functional magnetic resonance imaging study, 69
Craniocervical instability
Severe posttraumatic craniocervical instability in the very young patient. Report of three cases, 102
Craniocervical spine
Dura-splitting decompression of the craniocervical junction: reduced operative time, hospital stay, and cost with equivalent early outcome, 184
Craniopharyngioma
Comparative genomic hybridization analysis of pediatric adamantinomatous craniopharyngiomas and a review of the literature, 85
Craniosynostosis
Nonsynostotic scaphocephaly: the so-called sticky sagittal suture, 16
Cytogenetics
Comparative genomic hybridization analysis of pediatric adamantinomatous craniopharyngiomas and a review of the literature, 85
Cytokine
Surfactant poloxamer 188–related decreases in inflammation and tissue damage after experimental brain injury in rats, 91

Decompression
Dura-splitting decompression of the craniocervical junction: reduced operative time, hospital stay, and cost with equivalent early outcome, 184
Deep venous thrombosis
Deep venous thrombosis in children and adolescents, 32
Diagnosis
Deep venous thrombosis in children and adolescents, 32
Dolichocephaly
Nonsynostotic scaphocephaly: the so-called sticky sagittal suture, 16
Dura mater
Dura-splitting decompression of the craniocervical junction: reduced operative time, hospital stay, and cost with equivalent early outcome, 184
Duraplasty
Dura-splitting decompression of the craniocervical junction: reduced operative time, hospital stay, and cost with equivalent early outcome, 184
Dysphagia
Magnetic resonance imaging evidence of posterior pharynx denervation in pediatric patients with Chiari I malformation and absent gag reflex, 21

Electromagnetic field
Adjustment and malfunction of a programmable valve after exposure to toy magnets. Case report, 222
Electromyography
End-to-side neurorrhaphies in a rodent model of peripheral nerve injury: a preliminary report of a novel technique, 78
Encephalocele
Frontoethmoidal encephalocele with ocular leakage of cerebrospinal fluid. Case report, 218
Endoscope
Assessing the validity of the endoscopic shunt insertion trial: did surgical experience affect the results? 130
Ependymoma
The effects of hydrocephalus on intelligence quotient in children with localized infratentorial ependymoma before and after focal radiation therapy, 159
Epilepsy
Clinical outcomes after corpus callosotomy in patients with bihemispheric malformations of cortical development, 7
Epilepsy surgery
Searching for motor functions in dysgenic cortex: a clinical transcranial magnetic stimulation and functional magnetic resonance imaging study, 69
External ventricular drain
Complications of intracranial pressure monitoring in children with head trauma, 53

Fenestration
Hydrocephalus in children with middle fossa arachnoid cysts, 25
Fiberoptic monitor
Complications of intracranial pressure monitoring in children with head trauma, 53

Genetic instability
Comparative genomic hybridization analysis of pediatric adamantinomatous craniopharyngiomas and a review of the literature, 85
Gram-negative organism
Giant Gram-negative brain abscesses. Report of two cases, 97

Head injury
Imaging of head injuries in infants: temporal correlates and forensic implications for the diagnosis of child abuse, 44
Management of accidental minor head injuries in children: a prospective outcomes study, 38
Head trauma
Complications of intracranial pressure monitoring in children with head trauma, 53
Health status
An instrument to measure the health status in children with hydrocephalus: the Hydrocephalus Outcome Questionnaire, 134
Measuring the health status of children with hydrocephalus by using a new outcome measure, 141
Hemangioblastoma
Leptomeningeal hemangioblastoma. Case illustration, 122
Hindbrain hernia
A critical analysis of the Chiari 1.5 malformation, 179
Hindbrain herniation
Magnetic resonance imaging evidence of posterior pharynx denervation in pediatric patients with Chiari I malformation and absent gag reflex, 21
Hydrocephalus
An instrument to measure the health status in children with hydrocephalus: the Hydrocephalus Outcome Questionnaire, 134
Effects of hydrocephalus and ventriculoperitoneal shunt therapy on afferent and efferent connections in the feline sensorimotor cortex, 196
Giant Gram-negative brain abscesses. Report of two cases, 97
Measuring the health status of children with hydrocephalus by using a new outcome measure, 141
Subtemporal decompression for slit-ventricle syndrome: successful outcome after dramatic change in intracranial pressure wave morphology. Report of two cases, 214
The effects of hydrocephalus on intelligence quotient in children

with localized infratentorial ependymoma before and after focal radiation therapy, 159
The use of quick-brain magnetic resonance imaging in the evaluation of shunt-treated hydrocephalus, 147
Hypertelorism
Frontoethmoidal encephalocele with ocular leakage of cerebrospinal fluid. Case report, 218

Infant
Imaging of head injuries in infants: temporal correlates and forensic implications for the diagnosis of child abuse, 44
Infusion pump
Performance and complications associated with the Synchromed 10-ml infusion pump for intrathecal baclofen administration in children, 64
Intracranial pressure
Subtemporal decompression for slit-ventricle syndrome: successful outcome after dramatic change in intracranial pressure wave morphology. Report of two cases, 214
Intracranial pressure monitoring
Complications of intracranial pressure monitoring in children with head trauma, 53

Lacrimal secretion
Frontoethmoidal encephalocele with ocular leakage of cerebrospinal fluid. Case report, 218
Lecture
The past, present, and future of pediatric neurosurgery. Matson Lecture, May 4, 2004, 125
Leptomeninges
Leptomeningeal hemangioblastoma. Case illustration, 122

Macrocephaly
Hydrocephalus in children with middle fossa arachnoid cysts, 25
Magnetic resonance imaging
The use of quick-brain magnetic resonance imaging in the evaluation of shunt-treated hydrocephalus, 147
Malformation of cortical development
Clinical outcomes after corpus callosotomy in patients with bihemispheric malformations of cortical development, 7
Malignancy
Malignant prolactinoma with multiple bone and pulmonary metastases. Case report, 116
Medulloblastoma
Critical risk factors for intellectual impairment in children with posterior fossa tumors: the role of cerebellar damage, 152
Membrane fluidity
Surfactant poloxamer 188–related decreases in inflammation and tissue damage after experimental brain injury in rats, 91
Meningioma
Intraparenchymal meningioma in a child. Case report and review of the literature, 112
Meningocele
Expanding occult intrasacral meningocele associated with diastematomyelia and multiple vertebral anomalies. Case report, 108
Middle fossa
Hydrocephalus in children with middle fossa arachnoid cysts, 25

Natural history
Spontaneous regression of congenital spinal lipomas of the conus medullaris. Report of two cases, 226
Neurolysis
End-to-side neurorrhaphies in a rodent model of peripheral nerve injury: a preliminary report of a novel technique, 78
Neuropsychology
Critical risk factors for intellectual impairment in children with posterior fossa tumors: the role of cerebellar damage, 152
Neurorrhaphy
End-to-side neurorrhaphies in a rodent model of peripheral nerve injury: a preliminary report of a novel technique, 78
Neurosurgical history
The past, present, and future of pediatric neurosurgery. Matson Lecture, May 4, 2004, 125
Noninvasive motor mapping
Searching for motor functions in dysgenic cortex: a clinical transcranial magnetic stimulation and functional magnetic resonance imaging study, 69

Occipitocervical fusion
Treatment of basilar invagination associated with Chiari I malformations in the pediatric population: cervical reduction and posterior occipitocervical fusion, 189
Occiput
Severe posttraumatic craniocervical instability in the very young patient. Report of three cases, 102
Orthopedic surgery
Effect of selective dorsal rhizotomy on need for orthopedic surgery for spastic quadriplegic cerebral palsy: long-term outcome analysis in relation to age, 59

Peripheral nerve
End-to-side neurorrhaphies in a rodent model of peripheral nerve injury: a preliminary report of a novel technique, 78
Pituitary carcinoma
Malignant prolactinoma with multiple bone and pulmonary metastases. Case report, 116
Poloxamer
Surfactant poloxamer 188–related decreases in inflammation and tissue damage after experimental brain injury in rats, 91
Posterior fossa
A critical analysis of the Chiari 1.5 malformation, 179
Foramen magnum cerebrospinal fluid flow characteristics in children with Chiari I malformation before and after craniocervical decompression, 169
Programmable valve
Adjustment and malfunction of a programmable valve after exposure to toy magnets. Case report, 222
Prolactinoma
Malignant prolactinoma with multiple bone and pulmonary metastases. Case report, 116

Radiation exposure
The use of quick-brain magnetic resonance imaging in the evaluation of shunt-treated hydrocephalus, 147
Radiation treatment
Critical risk factors for intellectual impairment in children with posterior fossa tumors: the role of cerebellar damage, 152
The effects of hydrocephalus on intelligence quotient in children with localized infratentorial ependymoma before and after focal radiation therapy, 159
Randomized clinical trial
Assessing the validity of the endoscopic shunt insertion trial: did surgical experience affect the results? 130

Rat
End-to-side neurorrhaphies in a rodent model of peripheral nerve injury: a preliminary report of a novel technique, 78
Regression
Spontaneous regression of congenital spinal lipomas of the conus medullaris. Report of two cases, 226
Robert F. Heimburger
The relationship of the spinal cord to scoliosis. Historical vignette, 228

Sacrum
Expanding occult intrasacral meningocele associated with diastematomyelia and multiple vertebral anomalies. Case report, 108
Sagittal suture
Nonsynostotic scaphocephaly: the so-called sticky sagittal suture, 16
Scoliosis
The relationship of the spinal cord to scoliosis. Historical vignette, 228
Selective dorsal rhizotomy
Effect of selective dorsal rhizotomy on need for orthopedic surgery for spastic quadriplegic cerebral palsy: long-term outcome analysis in relation to age, 59
Sensorimotor cortex
Effects of hydrocephalus and ventriculoperitoneal shunt therapy on afferent and efferent connections in the feline sensorimotor cortex, 196
Sensorimotor reorganization
Searching for motor functions in dysgenic cortex: a clinical transcranial magnetic stimulation and functional magnetic resonance imaging study, 69
Shunt
Effects of hydrocephalus and ventriculoperitoneal shunt therapy on afferent and efferent connections in the feline sensorimotor cortex, 196
Giant Gram-negative brain abscesses. Report of two cases, 97
Hydrocephalus in children with middle fossa arachnoid cysts, 25
Shunt malfunction
Adjustment and malfunction of a programmable valve after exposure to toy magnets. Case report, 222
Skull fracture
Management of accidental minor head injuries in children: a prospective outcomes study, 38
Slit-ventricle syndrome
Subtemporal decompression for slit-ventricle syndrome: successful outcome after dramatic change in intracranial pressure wave morphology. Report of two cases, 214
Spastic cerebral palsy
Effect of selective dorsal rhizotomy on need for orthopedic surgery for spastic quadriplegic cerebral palsy: long-term outcome analysis in relation to age, 59
Spastic quadriplegia
Effect of selective dorsal rhizotomy on need for orthopedic surgery for spastic quadriplegic cerebral palsy: long-term outcome analysis in relation to age, 59
Spasticity
Acquired Chiari I malformation following baclofen pump placement in a child. Case report, 211
Performance and complications associated with the Synchromed 10-ml infusion pump for intrathecal baclofen administration in children, 64
Spinal dysraphism
Spontaneous regression of congenital spinal lipomas of the conus medullaris. Report of two cases, 226
Subdural hematoma
Imaging of head injuries in infants: temporal correlates and forensic implications for the diagnosis of child abuse, 44
Subtemporal decompression
Subtemporal decompression for slit-ventricle syndrome: successful outcome after dramatic change in intracranial pressure wave morphology. Report of two cases, 214
Supratentorial
Leptomeningeal hemangioblastoma. Case illustration, 122
Surfactant
Surfactant poloxamer 188–related decreases in inflammation and tissue damage after experimental brain injury in rats, 91
Syringomyelia
Foramen magnum cerebrospinal fluid flow characteristics in children with Chiari I malformation before and after craniocervical decompression, 169

Terminal filum syndrome
The relationship of the spinal cord to scoliosis. Historical vignette, 228
Tethered cord
Expanding occult intrasacral meningocele associated with diastematomyelia and multiple vertebral anomalies. Case report, 108
Tethered cord syndrome
The relationship of the spinal cord to scoliosis. Historical vignette, 228
Tonsillar ectopia
A critical analysis of the Chiari 1.5 malformation, 179
Magnetic resonance imaging evidence of posterior pharynx denervation in pediatric patients with Chiari I malformation and absent gag reflex, 21
Trauma
Management of accidental minor head injuries in children: a prospective outcomes study, 38
Traumatic brain injury
Surfactant poloxamer 188–related decreases in inflammation and tissue damage after experimental brain injury in rats, 91
Treatment
Deep venous thrombosis in children and adolescents, 32

Validity
Assessing the validity of the endoscopic shunt insertion trial: did surgical experience affect the results? 130
Ventriculoperitoneal shunt
Assessing the validity of the endoscopic shunt insertion trial: did surgical experience affect the results? 130
The use of quick-brain magnetic resonance imaging in the evaluation of shunt-treated hydrocephalus, 147
Ventriculostomy
Complications of intracranial pressure monitoring in children with head trauma, 53